

CHIEF JUDGE RICARDO S. MARTINEZ

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

SMARTWINGS, A.S., a Czech Republic
Company,

Plaintiff,

v.

THE BOEING COMPANY, a Delaware
Corporation,

Defendant.

Case No. 2:21-cv-00918-RSM

FIRST AMENDED COMPLAINT

Plaintiff Smartwings, a.s. hereby files its First Amended Complaint pursuant to the Court's February 25, 2022 Order (Dkt. 37), p. 20. In support thereof, Smartwings states the following:

I. PARTIES

1. Plaintiff Smartwings is a Czech Republic company with its registered place of business in Prague, Czech Republic.

2. Persuaded by the Boeing's Company's marketing about how superior Boeing's 737-8 aircraft (the "MAX") would be, on July 29, 2013, Smartwings entered into Purchase Agreement No. 3989, along with a corresponding general terms agreement, tables, exhibits, letter agreements, and other attachments, to purchase three MAX aircraft directly from the Defendants (the "Purchase Agreement").

3. Smartwings entered into another agreement, Purchase Agreement No. 4606, to purchase an additional five aircraft, but this agreement has been terminated by mutual consent.

4. In further reliance on Boeing's marketing and representations, Smartwings also entered into a series of Lease Agreements by which Smartwings agreed to lease an additional 31 MAX aircraft.

5. Through either the Purchase Agreement or the Lease Agreements, Smartwings or entities controlled by Smartwings have accepted delivery of 7 MAX aircraft since January 2018.

6. Smartwings was scheduled to take delivery of another 14 MAX aircraft between March and December 2019, as well as 21 between 2020, 2021, and 2022, leading to an all-MAX fleet by 2023.

7. Defendant The Boeing Company is a Delaware corporation with its corporate headquarters in Chicago, Illinois.

II. JURISDICTION, VENUE, AND CHOICE OF LAW

8. This Court has jurisdiction over Defendant The Boeing Company because Boeing transacts business and manufactures the MAX in King County, Washington.

9. Venue is proper in this Court pursuant to RCW 4.12.025 because Defendant The Boeing Company transacts business and maintains an office for transacting business in King County, Washington.

10. The Purchase Agreement is a standardized adhesion contract drafted by Boeing, and Smartwings was not provided a meaningful opportunity to negotiate fair contractual protections against Boeing's fault or negligence. Each of the Purchase Agreements with Boeing provides that it is to be interpreted and governed under the laws of the State of Washington.

11. This lawsuit arises under Article 2 of Washington's Uniform Commercial Code, RCW 62A.2-101 et seq., the Washington Consumer Protection Act¹, RCW 19.86.020, the Washington Product Liability Act, RCW 7.72.010 et seq., and Washington common law.

¹ Smartwings acknowledges that its Washington Consumer Protection Act claim has been dismissed by the Court's February 25, 2022 Order (Dkt. 37). Smartwings is leaving the claim in this Amended Complaint to preclude any arguments of waiver if there is a subsequent appeal. *See Lacey v. Maricopa Cty.*, 693 F.3d 896, 928 (9th Cir. 2012).

III. INTRODUCTION

12. Smartwings, a.s. (formerly known as Travel Services a.s) is a European airline based in the Czech Republic. Smartwings operates throughout Europe and other travel destinations. Until recently, Smartwings and its subsidiaries carried more than eight million passengers annually.

13. When Boeing began selling the 737-8 aircraft (the “MAX”), Boeing heavily marketed it as a new and improved version of its venerable 737 that would retain the 737’s “unparalleled” safety record but that would have a new generation of highly efficient engines. Boeing represented that pilots qualified to fly the 737 NG would need only minimal transition training for the MAX. These and other representations convinced Smartwings to acquire more than 40 MAXs and to convert to an all-MAX fleet by 2023.

14. But Boeing did not deliver what it promised or what safety required. Most significantly, the larger size of the new engines altered the aerodynamics of the MAX and made its handling qualities unacceptable.

15. Rather than make traditional and accepted (but expensive and time-consuming) design changes to improve these qualities, Boeing chose a cheap and hastily implemented bandaid, which Boeing named “MCAS.”² MCAS was computer code that pushed the airplane’s nose down without telling the pilots it was doing so. MCAS masked the MAX’s handling problems when it worked as designed, but MCAS’s design placed dangerous reliance on a single prone-to-failure sensor. When the sensor malfunctioned, MCAS could force the aircraft into a steep and often unrecoverable fatal dive.

16. Even worse, Boeing failed to follow its own procedures and industry accepted safety standards by failing to conduct a full safety evaluation of MCAS failure modes. Boeing also misled the Federal Aviation Administration (“FAA”) and other regulators regarding the nature and purpose of MCAS. This allowed MCAS to slip through the certification process without any

² The acronym stands for “Maneuvering Characteristics Augmentation System.”

1 regulatory challenge to its built-in fatal flaw.³

2 17. Boeing also made material misrepresentations and nondisclosures to MAX pilots
3 and customers, including Smartwings, related to MCAS and other aspects of the 737 MAX design
4 as more fully described below. Most significantly, in order to avoid a requirement to train pilots
5 on MCAS, Boeing concealed MCAS's very existence from customers and pilots and falsely told
6 them the MAX would act exactly the same as older 737's. Boeing justified this to regulators by
7 representing that an MCAS failure would mimic another unrelated failure that pilots were already
8 trained to deal with, such that pilots could save the plane by misdiagnosing the MCAS failure and
9 applying these known emergency procedures. That representation was false.

10 18. Smartwings entered into agreements for and accepted delivery of the MAX aircraft
11 in reliance on Boeing's false assurances that the MAX was "as safe as any airplane that has ever
12 flown the skies," including the 737NG, and trusting that Boeing had disclosed all material
13 information about the design and operation of the MAX to customers and regulators. Smartwings
14 operated MAX aircraft on more than 6,000 flights throughout Europe prior to the MAX's
15 grounding. Unaware of the MAX's defects, Smartwings inadvertently exposed its agents and
16 employees, the flying public, and millions of persons on the ground below to a significant risk of
17 injury or death by operating those aircraft.

18 19. On October 29, 2018, Lion Air Flight 610, a nearly new 737 MAX 8, crashed into
19 the Java Sea, killing all 189 people aboard. A preliminary report issued by Indonesian aviation
20 regulators shortly after the crash indicated that a malfunctioning MCAS had pushed the aircraft's
21 nose down more than 26 times before it finally caused the aircraft to crash.

22 20. Smartwings suspected there might be a problem with the MAX design, and wrote
23 Boeing a letter demanding answers.

24 ³ See, pp. 8-9, Office of Inspector General, Timeline of Activities Leading to the Certification of
25 the Boeing 737 Max 8 Aircraft and Actions Taken After the October 2018 Lion Air Accident (the
26 "Inspector General's Report"), available at [https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Boeing%20737%20MAX%20Certification%20Timeline%20Final%20Re](https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Boeing%20737%20MAX%20Certification%20Timeline%20Final%20Report.pdf%20)
27 [port.pdf%20](https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Boeing%20737%20MAX%20Certification%20Timeline%20Final%20Report.pdf%20)(last accessed Jan. 28, 2021)

21. Boeing's public reaction to the Lion Air crash was to unfairly blame the pilots and to issue a November 6, 2018 bulletin to operators basically telling pilots to brush up on existing procedures for handling non-MCAS nose down trim commands. The bulletin made no mention of the existence of MCAS.⁴

22. Boeing neither grounded the MAX on its own, nor responded in substance to Smartwings' letter. At the same time, Boeing began a frantic internal project to fix MCAS. Boeing proposed a redesign to the FAA, but inexplicably kept this critical piece of information from the operators and the public at large.⁵

23. On March 10, 2019, a second MAX – Ethiopian Air Flight 302 – crashed in Ethiopia, killing another 157 people.

24. Around the same time, Boeing was working actively to persuade Smartwings to take delivery of a new aircraft later that month ("Aircraft 60134") even though Boeing still had not answered Smartwings' specific questions about the safety of the aircraft.

25. Smartwings immediately wrote Boeing a March 10, 2019 email questioning the safety of the aircraft and seeking Boeing's assurance that it was safe. Boeing still failed to provide Smartwings any meaningful information other than an assurance that Boeing's senior leadership was aware of Smartwings' concerns. Three days later, Boeing acknowledged that the MAX needed to be grounded until it could be fixed and determined to be safe.

26. Boeing's response to the MAX crashes and subsequent grounding crisis was horrendous. Boeing first attempted to blame the pilots, the airlines, and its own subcontractors for the MAX's defects and the crashes. Boeing started trying to fix MCAS shortly after the Lion Air crash, and euphemistically called it a "product improvement."

⁴ See also p. 9, Office of Inspector General, Timeline of Activities Leading to the Certification of the Boeing 737 Max 8 Aircraft and Actions Taken After the October 2018 Lion Air Accident (the "Inspector General's Report"), available at <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Boeing%20737%20MAX%20Certification%20Timeline%20Final%20Report.pdf> (last accessed Jan. 28, 2021).

⁵ *Id.*

27. Even after the Lion Air crash, Boeing continued keeping the very existence of MCAS secret until the FAA forced more disclosure. After the MAX was grounded following the Ethiopian crash, Boeing promised that it would fix the problem within weeks, and that customers and passengers could safely and confidently resume MAX flights in short order.

28. As the grounding dragged on, Boeing repeatedly promised a fix was just around the corner but was unable to deliver for nearly twenty months. As of June 2021, the MAX is only just beginning to return to service and is not yet approved to fly commercially worldwide. Smartwings was left in limbo for more than a year, unable to make reliable plans about when it would receive the promised aircraft. Boeing's botched and ineffective response to the crashes and its own misconduct has made the MAX's problems much worse and has substantially increased Smartwings' damages.

29. Smartwings would not have committed to an all-MAX fleet or accepted delivery of any MAX had it known what has since been uncovered by outside investigators and what Boeing has grudgingly admitted.

30. Smartwings has not been able to use the MAX aircraft in its fleet, or obviously the MAX aircraft which it expected to be delivered and which have not been delivered, due to Boeing's misconduct. Smartwings has suffered substantial losses as a result.

31. Further, due to Boeing's repeated nondisclosures, misrepresentations, and technical failures, Smartwings, other purchasers, and the traveling public have lost faith in the safety of the MAX and in Boeing. This has substantially reduced the value of the aircraft, even as the MAX returns to service. Smartwings therefore seeks to revoke acceptance of its Aircraft, and to recover damages and other relief caused by Boeing's breaches of contract, good faith and fair dealing, misrepresentations, grossly negligent product design, and unfair and deceptive practices.

IV. FACTS

A. Boeing's Development of the MAX

32. Boeing first designed its 737 aircraft in the mid-1960s, and the original 737 (known as the 737-100) was granted a Type Certificate by the FAA in December 1967. Since that time,

Boeing has designed and built fourteen variations of the 737, the most recent of which is the MAX.⁶ The 737 is Boeing's most popular and profitable aircraft.⁷

33. Across the fourteen variations, the 737 has changed and grown substantially. For example, the MAX weighs 60% more than the 737-100, and each engine of the MAX puts out more than double the thrust of a 737-100 engine. Despite this, and despite the radical changes in design and safety standards since 1967, Boeing has never applied for a new Type Certificate for the 737. Instead, Boeing sought and obtained the FAA's permission to certify the MAX and the other twelve 737 variants via "amendments" to the original 1967 Type Certificate.⁸

34. When the 737 was certified in 1967, cockpit electronics and automation were in their infancy. Due to advances in electronic equipment such as autopilots and computers, as well as increased weight and thrust of successive models of the 737, Boeing has added substantial automation to the 737's cockpit in successive variations of the 737 over the last 50 years.

35. However, Boeing used the fact that the original 737 was certified in 1967 with virtually no electronics to convince the FAA to add these devices to the 737 Type Certificate⁹ as non-critical optional equipment that is evaluated based on lower standards for safety and redundancy than critical flight safety systems.

1. Boeing Decides to Modify the 737 Rather Than Develop a New Aircraft

⁶ Testimony of Daniel K. Elwell, Acting Administrator, Federal Aviation Administration, Before The Committee On Transportation And Infrastructure United States House Of Representatives, "Status Of The Boeing 737 Max" May 15, 2019 ("Elwell Testimony") (available at <https://www.transportation.gov/testimony/status-boeing-737-max> (last accessed Jan. 28, 2021)).

⁷ Claire Bushey, "The 737 crisis has strategic consequences for Boeing" Crain's Chicago Business, May 3, 2019 (available at <https://www.chicagobusiness.com/manufacturing/737-crisis-has-strategic-consequences-boeing>).

⁸ Elwell Testimony; *see also* Federal Aviation Administration, Type Certificate Data Sheet A16WE, (available at [https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/0/8176cb9e577981148625761c006610de/\\$FILE/A16WE_R44.pdf](https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/0/8176cb9e577981148625761c006610de/$FILE/A16WE_R44.pdf)) (last accessed Jan. 28, 2021).

⁹ Federal Aviation Administration, Type Certificate Data Sheet A16WE, (available at [https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/0/8176cb9e577981148625761c006610de/\\$FILE/A16WE_R44.pdf](https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/0/8176cb9e577981148625761c006610de/$FILE/A16WE_R44.pdf)) (last accessed Jan. 28, 2021).

36. In December 2010, Airbus surprised the industry when it announced the A320neo, which offered significantly greater fuel efficiency than the previous generation of A320 aircraft or the 737NG.¹⁰ The A320neo did this by incorporating a new generation of engines that were larger, more powerful, and more fuel efficient.

37. In February 2011, Boeing announced that it would probably replace the 45-year-old 737 design with an entirely new narrow-body twinjet aircraft to compete with the A320neo.¹¹ Boeing's 737 replacement was likely planned to be a "fly-by-wire" aircraft that replaced older-style manual and conventional flight controls—such as those in the 737—with a modern computer-controlled system.¹² This would make the 737 replacement more competitive with the A320, a much newer design that already had fly-by-wire controls. Boeing's CEO estimated that the new aircraft would probably not be available until approximately 2020.¹³

38. In July 2011, American Airlines, which had until then exclusively flown Boeing aircraft, announced an order for 260 Airbus aircraft, including 130 A320neo aircraft.¹⁴

39. American Airlines' Airbus order forced Boeing's hand because it made clear that

¹⁰ Airbus Press Release, Dec. 1, 2010, "Airbus offers new fuel saving engine options for A320 Family." (available at <https://www.airbus.com/newsroom/press-releases/en/2010/12/airbus-offers-new-fuel-saving-engine-options-for-a320-family.html>) (last accessed Jan. 28, 2021).

¹¹ See Flight Global, "Boeing boss green-lights all-new next generation narrowbody," February 10, 2011 (available at <https://www.flightglobal.com/news/articles/boeing-boss-green-lights-all-new-next-generation-nar-353056/>) (last accessed Jan. 28, 2021).

¹² See Flight Global, "Boeing firms up 737 replacement studies by appointing team," March 3, 2006 (available at <https://www.flightglobal.com/news/articles/boeing-firms-up-737-replacement-studies-by-appointing-205223/>) (last accessed Jan. 28, 2021).

¹³ Flight Global, "Boeing boss green-lights all-new next generation narrowbody," February 10, 2011 (available at <https://www.flightglobal.com/news/articles/boeing-boss-green-lights-all-new-next-generation-nar-353056/>) (last accessed Jan. 28, 2021).

¹⁴ American Airlines Press Release, June 20, 2011, "AMR Corporation Announces Largest Aircraft Order in History With Boeing and Airbus" (available at <http://news.aa.com/news/news-details/2011/AMR-Corporation-Announces-Largest-Aircraft-Order-in-History-With-Boeing-and-Airbus/default.aspx>) (last accessed Jan. 28, 2021).

Boeing would lose short-term sales and profits if it could not deliver an aircraft to compete with the A320neo until 2020.

40. Shortly after American Airlines' announcement, Boeing announced that it would scrap its project to replace the 737, and instead would do one more upgrade to the venerable 737 that would incorporate the new generation of efficient engines, but would make few other changes. Boeing decided to call this aircraft the "737 MAX."¹⁵

41. Boeing also made the decision to certify the MAX via an amendment to the original 737 Type Certificate from the 1960s rather than a new Type Certificate. This would allow Boeing to start selling and delivering MAX aircraft more quickly, thereby maintaining the higher profits associated with a mature aircraft design. This decision also made it easier for Boeing to avoid complying with the newest safety regulations.

42. Boeing employees described the pace of work creating the MAX as frenetic and on an "extremely compressed" timeline. They also stated that, due to the haste of development, designers made errors, such as creating sloppy blueprints for assembly technicians.¹⁶

43. Boeing also concluded that the MAX's cockpit, flight controls, and handling qualities would need to be very similar to those in the 737NG in order to compete with the A320neo. This was because Boeing needed to advertise minimal pilot retraining time for the MAX, just as Airbus was advertising for the A320neo.

44. However, it is much more difficult to maintain the same handling qualities from one version to another in aircraft with the MAX's conventional aircraft controls—whose handling

¹⁵ Boeing Press Release, July. 20, 2011 "Boeing Launches 737 New Engine Family with Commitments for 496 Airplanes from Five Airlines" (available at <https://boeing.mediaroom.com/2011-08-30-Boeing-Launches-737-New-Engine-Family-with-Commitments-for-496-Airplanes-from-Five-Airlines>) (last accessed Jan. 28, 2021).

¹⁶ David Gelles, Natalie Kitroeff, Jack Nicas, and Rebecca R. Ruiz, "Boeing Was 'Go, Go, Go' to Beat Airbus With the 737 Max" New York Times Mar. 23, 2019 (available at <https://www.nytimes.com/2019/03/23/business/boeing-737-max-crash.html>) (last accessed Jan. 28, 2021).

1 qualities are dictated by aerodynamic forces— than it is with a fly-by-wire aircraft where the
2 handling qualities are computer-controlled.

3 45. Nonetheless, Boeing’s management imposed an internal directive to avoid any
4 requirement that 737NG pilots obtain MAX transition training in a flight simulator,¹⁷ and instead
5 demanded that Boeing’s engineers and flight test pilots design transition training that could be
6 done using a tablet computer and in less than an hour.¹⁸ Boeing management also directed its
7 engineers to make few if any changes to the cockpit display, even if it meant not incorporating the
8 latest safety features.¹⁹

9 46. These directives were driven by economics and marketing, not by safety. For
10 example, Boeing’s original MAX brochure proclaimed that 737NG pilots would not need any
11 significant transition training.²⁰ And the United States House of Representatives Transportation
12 and Infrastructure Committee found that Southwest Airlines was offered a \$1-million-per-plane
13 rebate if pilot training was required for the MAX.²¹

14 47. Boeing employees apparently raised concerns during the MAX’s development
15 about “the company’s commitment to safety,” and there is evidence of “efforts by some employees

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17 ¹⁷ *Id.*

18 ¹⁸ CNN, “Boeing promoted 737 MAX as requiring little additional pilot training” (available at
19 <https://www.cnn.com/2019/03/22/politics/boeing-737-manual/index.html>) (last accessed Jan. 28,
20 2021); CNN, “737 pilots trained for Max 8 with short online course” (available at
21 [https://www.cnn.com/2019/03/22/us/max-8-boeing-self-administered-courses-lion-air-ethiopian-
airlines-intl/index.html#:~:text=Pilots%20transitioning%20to%20the%20Boeing,two%20American%20carriers%20told%20CNN](https://www.cnn.com/2019/03/22/us/max-8-boeing-self-administered-courses-lion-air-ethiopian-airlines-intl/index.html#:~:text=Pilots%20transitioning%20to%20the%20Boeing,two%20American%20carriers%20told%20CNN)) (last accessed Jan. 28, 2021).

22 ¹⁹ David Gelles, Natalie Kitroeff, Jack Nicas, and Rebecca R. Ruiz, “Boeing Was ‘Go, Go, Go’ to
23 Beat Airbus With the 737 Max” New York Times Mar. 23, 2019 (available at
24 <https://www.nytimes.com/2019/03/23/business/boeing-737-max-crash.html>) (last accessed Jan.
25 28, 2021).

26 ²⁰ *Id.*

27 ²¹ David Gelles and Natalie Kitroeff, “Documents Show Safety Concerns at Boeing Before Deadly
Crashes,” New York Times, Oct. 30, 2019 (available at [https://www.nytimes.com
/2019/10/30/business/boeing-muilenburg-testimony-congress.html](https://www.nytimes.com/2019/10/30/business/boeing-muilenburg-testimony-congress.html)) (last accessed Jan. 28, 2021).

1 to ensure Boeing's production plans were not diverted by regulators or others."²² But these
2 concerns and efforts went unanswered and unaddressed.

3 **2. Flaws in the MAX Design Process**

4 48. On information and belief, the competitive pressures described above, and the
5 resulting marketing-driven directive to design the MAX to require little or no additional training
6 for 737NG pilots, led Boeing to hide the significant differences in the MAX's aerodynamics as
7 well as the difficulties Boeing encountered in meeting the minimal training directive.

8 49. They also led Boeing to take shortcuts to meet the marketing directives and bring
9 the MAX to market quick enough to maintain profits. Such shortcuts would have been unthinkable
10 for previous generations of Boeing executives, but Boeing's current profit-driven executives
11 required them.

12 50. The most significant MAX design change was to incorporate the new generation
13 high efficiency engines (known as CFM LEAP-1B engines).²³ This change was difficult to
14 implement because the LEAP-1B engines were larger and could not easily fit under the 737's
15 relatively low wings.

16 51. To obtain adequate ground clearance without making more significant and more
17 expensive design changes, Boeing left the wing and fuselage heights nearly unchanged, but moved
18 the engines up and forward in order to maintain the mandatory minimum 17-inch ground clearance
19 from the bottom of the new and larger engines.²⁴

20 ²² Steve Miletich and Dominic Gates, "Boeing documents sent to House committee called 'very
21 disturbing,'" Seattle Times, Dec. 23, 2019 (available at [https://www.seattletimes.com/business/
22 boeing-aerospace/boeing-documents-sent-to-house-committee-called-very-disturbing/?utm
23 source=email&utm_medium=email&utm_campaign=article_inset_1.1](https://www.seattletimes.com/business/boeing-aerospace/boeing-documents-sent-to-house-committee-called-very-disturbing/?utm_source=email&utm_medium=email&utm_campaign=article_inset_1.1)) (last accessed Jan. 28,
2021).

24 ²³ Boeing Press Release, Aug. 30, 2011 "Boeing Launches 737 New Engine Family with
25 Commitments for 496 Airplanes from Five Airlines" (available at
26 [https://boeing.mediaroom.com/2011-08-30-Boeing-Launches-737-New-Engine-Family-with-
27 Commitments-for-496-Airplanes-from-Five-Airlines](https://boeing.mediaroom.com/2011-08-30-Boeing-Launches-737-New-Engine-Family-with-Commitments-for-496-Airplanes-from-Five-Airlines)) (last accessed Jan. 28, 2021).

²⁴ See Anurag Kotoky and Kyunghye Park, "Boeing's Grounded 737 Max — The Story So Far",
Washington Post, July 9, 2019 (available at <https://www.washingtonpost.com/business/boeings->

52. The new mount location of these engines gave the MAX a new and unacceptable handling characteristic – a propensity for the aircraft’s nose to abnormally pitch up (i.e., the nose would move up and cause the aircraft to climb and/or slow down) under certain unusual flight conditions.²⁵

53. Boeing engineers predicted this tendency early in the design process, particularly during an extreme high-speed test maneuver known as a “wind-up turn,” during which the aircraft experiences significant g-forces.²⁶ However, during flight testing, the MAX also exhibited a pitch-up problem during low-speed, low-G maneuvers.²⁷

54. A pitch-up tendency at low speed could cause a dangerous aerodynamic stall and is not allowed by FAA regulations.²⁸ An FAA regulation requires that “[n]o abnormal nose-up pitching may occur. . . . In addition, it must be possible to promptly prevent stalling and to recover from a stall by normal use of the controls.”²⁹

55. Such undesirable handling characteristics are not unheard of when an aircraft’s configuration is changed. They can usually be fixed with various well-understood aerodynamic

[grounded-737-max-the-story-so-far/2019/07/08/5eb2e4be-a1e6-11e9-a767-d7ab84aef3e9_story.html](https://www.seattletimes.com/seattle-news/times-watchdog/the-inside-story-of-mcas-how-boeings-737-max-system-gained-power-and-lost-safeguards/) (last accessed Jan. 28, 2021); <https://www.latimes.com/local/california/la-fi-boeing-max-design-20190315-story.html> (last accessed Jan. 28, 2021).

²⁵ Dominic Gates and Mike Baker, “The inside story of MCAS: How Boeing’s 737 MAX system gained power and lost safeguards,” Seattle Times, June 22, 2019 (available at <https://www.seattletimes.com/seattle-news/times-watchdog/the-inside-story-of-mcas-how-boeings-737-max-system-gained-power-and-lost-safeguards/>) (last accessed Jan. 28, 2021).

²⁶ *Id.*

²⁷ *Id.*

²⁸ A “stall” is a dangerous condition for aircraft and occurs when there is insufficient air moving across the aircraft’s wings to keep the aircraft flying. This usually – but not always – happens when the aircraft is moving too slowly through the air. A stall causes the aircraft to suddenly drop and can cause an even more dangerous spin. Stopping the stall requires the pilot to take quick and decisive action to return the aircraft to safe flight.

²⁹ 14 C.F.R. § 25.203(a) – Stall *Characteristics*.

changes, but making such changes is expensive and can delay an aircraft's certification—particularly when the need for them is discovered late in the development process.

56. Rather than making expensive aerodynamic changes, Boeing decided to fix the MAX's pitch-up problem with software. This approach was similar the way such a problem would be fixed on a digital fly-by-wire aircraft. But Boeing ignored the fact that the MAX did not have the added redundancies of a fly-by-wire aircraft.

57. The software that Boeing designed would automatically activate a system that applied downward stabilizer trim in order to reduce the force the pilots needed to use on the control wheel to push the nose down. This software—called MCAS—was originally designed into the MAX to deal with the pitch-up tendency during wind-up turns, so it activated only when it sensed the aircraft was near a stall and was experiencing high G-forces.³⁰

58. When Boeing's flight testing revealed that the MAX also had a pitch-up problem during low-speed maneuvers, Boeing decided to expand MCAS to deal with this problem as well. To make MCAS effective to eliminate the pitch-tendency at low speeds, however, Boeing made critical and dangerous changes to MCAS.

59. First, Boeing made it four times more powerful so that it pushed the nose down much more aggressively than originally designed.³¹ Second, Boeing eliminated one of the two sensors that told MCAS when to activate. As originally designed, MCAS relied on both an Angle of Attack ("AOA") vane and a G-Force meter for this purpose so that it would activate only when the AOA vane and the G-force meter both sensed an impending high-G stall.³² To make MCAS

³⁰ Dominic Gates and Mike Baker, "The inside story of MCAS: How Boeing's 737 MAX system gained power and lost safeguards," Seattle Times, June 22, 2019 (available at <https://www.seattletimes.com/seattle-news/times-watchdog/the-inside-story-of-mcas-how-boeings-737-max-system-gained-power-and-lost-safeguards>) (accessed Jan. 28, 2021).

³¹ Jack Nicas, David Gelles, and James Glanz, "Changes to Flight Software on 737 Max Escaped F.A.A. Scrutiny," New York Times Apr. 11, 2019 (available at <https://www.nytimes.com/2019/04/11/business/boeing-faa-mcas.html>) (last accessed Jan. 28, 2021).

³² Dominic Gates and Mike Baker, "The inside story of MCAS: How Boeing's 737 MAX system gained power and lost safeguards," Seattle Times, June 22, 2019 (available at

1 activate during low-G maneuvers, Boeing eliminated MCAS's dependence on a G-force meter and
 2 left it completely dependent on the AOA vane as the single source of information about when
 3 MCAS should aggressively push the nose down.

4 60. When they work, AOA vanes provide a direct reading of when an aircraft is nearing
 5 or entering a stall – but they are prone to malfunctioning. Even though the MAX has two AOA
 6 vanes, Boeing designed MCAS to rely on only one of the AOA vanes during flight.

7 61. Also, Boeing failed to include self-diagnostic software in MCAS that would have
 8 allowed it to detect and deactivate an obviously malfunctioning AOA vane.³³

9 62. Finally, Boeing programmed MCAS so that it reset itself five seconds after every
 10 application of pitch-down stabilizer trim – and never stopped as long as MCAS believed the
 11 aircraft was close to stalling.³⁴ Thus, a system that should have had triple-redundancy was
 12 designed by Boeing to rely on a single prone-to-failure sensor with no redundancy whatsoever.

13 63. As described above, Boeing's "ground rule" for engineers during the development
 14 of the MAX was to avoid any features that would require pilot training in a flight simulator.³⁵ A
 15 Boeing engineer who worked on the cockpit design of the MAX said "the company was trying to
 16 avoid costs and trying to contain the level of change. They wanted the minimum change to simplify

17
 18 <https://www.seattletimes.com/seattle-news/times-watchdog/the-inside-story-of-mcas-how-boeings-737-max-system-gained-power-and-lost-safeguards>) (accessed Jan. 28, 2021).

19 ³³ The recklessness of this flaw is apparent from the Ethiopian Air crash, where the broken AOA
 20 sensor was reporting an angle of attack of 75 degrees or more and MCAS was not programmed to
 21 recognize that it is physically impossible for a MAX to have an angle of attack of more than
 approximately 20 degrees.

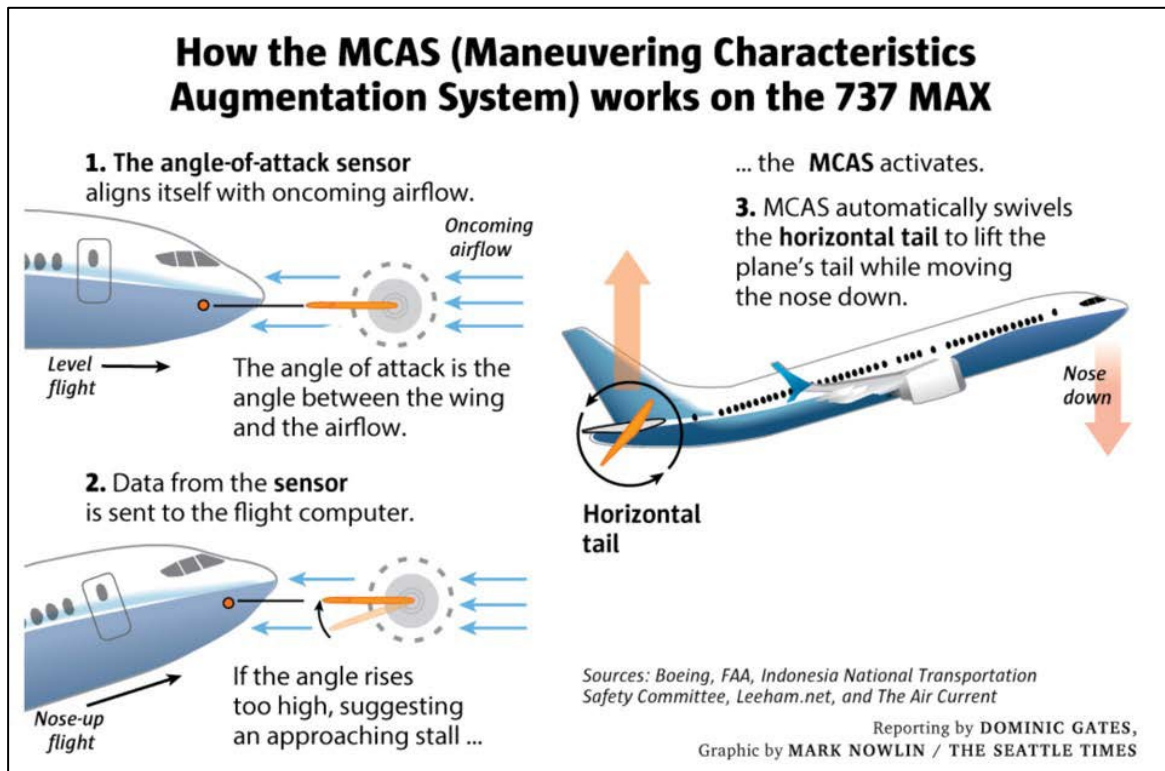
22 ³⁴ Dominic Gates, "Flawed *analysis*, failed oversight: How Boeing, FAA certified the suspect 737
 23 MAX flight control system," Seattle Times, Mar. 17, 2019 (available at <https://www.seattletimes.com/business/boeing-aerospace/failed-certification-faa-missed-safety-issues-in-the-737-max-system-implicated-in-the-lion-air-crash/>) (last accessed Jan. 28, 2021).

25 ³⁵ David Gelles, Natalie Kitroeff, Jack Nicas, and Rebecca R. Ruiz, "Boeing Was 'Go, Go, Go' to
 26 Beat Airbus With the 737 Max" New York Times Mar. 23, 2019 (available at
 27 <https://www.nytimes.com/2019/03/23/business/boeing-737-max-crash.html>) (last accessed Jan. 28, 2021).

the training differences, minimum change to reduce costs, and to get it done quickly.”³⁶

64. As described more fully below, this “ground rule” caused Boeing to decide to hide the operation—and even the existence—of MCAS from Smartwings or other MAX purchasers and their pilots so that they would not even suspect that additional training might be necessary.

65. A simple diagram of MCAS’s operation as it appeared in a local newspaper is shown below:



66. First, Boeing’s development and testing of MCAS was deeply flawed. As described above, MCAS’s power had to be increased by a factor of four.

67. There are indications that Boeing recognized MCAS was too powerful and made the MAX difficult to control. In November 2016, for example, a Boeing test pilot complained in an internal message that the system was “running rampant” during flight simulator operation. He also wrote—in a tragic preview of the two fatal MAX crashes—that “the plane is trimming itself

³⁶ *Id.*

1 like cra[z]y [sic].”³⁷ These messages were sent late in the MAX’s development, just seven months
2 before the MAX’s first delivery.

3 68. Second, Boeing employees recognized the danger of changing MCAS to rely on a
4 single AOA sensor that could malfunction. Boeing considered adding a cockpit alert that would
5 tell pilots when MCAS was engaged, but ultimately decided not to include the alert.³⁸ In 2015, an
6 engineer raised concerns that the system was vulnerable to malfunctioning because it relied on a
7 single sensor, but those concerns were ignored.³⁹

8 69. In order to meet certification requirements, Boeing is required to conduct a “System
9 Safety Analysis” of any new system added to the cockpit and report the results to the FAA.

10 70. As part of this analysis, Boeing must give one of four rankings to each potential
11 failure mode for the new system: minor, major, hazardous, and catastrophic. “Catastrophic” is
12 defined as a failure that is likely to result in “multiple fatalities and/or loss of the [aircraft].”
13 “Hazardous” is defined as a failure that is likely to result in “serious or fatal injury to a small
14 number of occupants of aircraft (except operator),” and “Major” is defined as a failure that causes
15 “physical distress to occupants of aircraft” but no serious or fatal injuries.

16 71. If a given system failure is ranked as “catastrophic” or “hazardous,” Boeing must
17 show that multiple redundancies or other features make the failure of that system virtually
18 impossible. This requirement is why a digital fly-by-wire aircraft must have triple-redundant
19 systems.

20 72. Boeing’s System Safety Analysis for MCAS was dangerously inadequate. Major
21 portions of the System Safety Analysis did not even reevaluate the final version of MCAS – they

22
23 ³⁷ Boeing claims that these comments pertain to an unrelated problem with simulator software, but
24 has not produced evidence to support this claim.

25 ³⁸ David Gelles and Natalie Kitroeff, “Documents Show Safety Concerns at Boeing Before Deadly
26 Crashes,” New York Times, Oct. 30, 2019 (available at <https://www.nytimes.com/2019/10/30/business/boeing-muilenburg-testimony-congress.html>) (last accessed Jan. 28, 2021).

27 ³⁹ *Id.*

1 instead evaluated the previous version, the version used before Boeing increased MCAS's power
2 by a factor of four.⁴⁰

3 73. In addition, Boeing failed to evaluate the fact that a false reading by the single AOA
4 sensor that drove MCAS would not only aggressively push the aircraft's nose down for no apparent
5 reason—it would also set off multiple alarms and cause multiple cockpit instruments to display
6 inaccurate or inconsistent data on critical items such as altitude and airspeed.⁴¹

7 74. This meant that pilots would need to deal with these alarms and misleading data at
8 the same time they were fighting MCAS for control of the aircraft.

9 75. Boeing represented to the FAA that if MCAS malfunctioned and commanded nose
10 down trim when the aircraft was not near a stall, MCAS could easily be countermanded or shut off
11 by the pilots via a cutoff switch in the cockpit. They could then, Boeing claimed, safely fly the
12 aircraft using the manual trim wheel that remained in the MAX as a vestige of the original 1967
13 design. Boeing did not disclose, however, that this conclusion failed to account for MCAS's
14 increased power and the increased trim wheel forces resulting from the MAX's substantially higher
15 weight and thrust.⁴²

16 76. Boeing also did not evaluate the other changes it made to MCAS-related cockpit
17 controls that made it difficult for pilots to recognize and counteract a malfunctioning MCAS's
18 aggressive pitch-down commands. Boeing also did not disclose that a MCAS malfunction that
19 occurred while the aircraft was traveling at normal climb or cruise speeds would be substantially
20

21 ⁴⁰ Dominic Gates and Mike Baker, "The inside story of MCAS: How Boeing's 737 MAX system
22 gained power and lost safeguards" Seattle Times, June 24, 2019 (available at
23 <https://www.seattletimes.com/seattle-news/times-watchdog/the-inside-story-of-mcas-how-boeings-737-max-system-gained-power-and-lost-safeguards/>) (last accessed Jan. 28, 2021).

24 ⁴¹ Dominic Gates, "Flawed analysis, failed oversight: How Boeing, FAA certified the suspect 737
25 MAX flight control system," Seattle Times, Mar. 17, 2019 (available at
26 <https://www.seattletimes.com/business/boeing-aerospace/failed-certification-faa-missed-safety-issues-in-the-737-max-system-implicated-in-the-lion-air-crash/>) (last accessed Jan. 28, 2021).

27 ⁴² *Id.*

1 more dangerous than an MCAS malfunction that occurred at low airspeeds where MCAS was
2 designed to operate.⁴³

3 77. Finally, Boeing's safety analysis failed to account for the fact that if the single AOA
4 sensor failed, MCAS would continue to reset itself and attempt to force the nose down every fifteen
5 seconds, and that this aspect of MCAS could put the aircraft into a dive so steep that recovery
6 would be impossible.

7 78. Relying on this deeply flawed analysis, Boeing falsely reported to the FAA that an
8 MCAS failure should be ranked as "major" but not "hazardous" or "catastrophic." In other words,
9 Boeing represented to the FAA and other regulators that a malfunctioning MCAS would cause
10 "physical distress to occupants of aircraft," but not "multiple fatalities and/or loss of the [aircraft]."

11 79. A proper System Safety Analysis would have made clear that Boeing needed to
12 eliminate MCAS entirely, or at the very least rank MCAS failures as "catastrophic" and design
13 MCAS very differently to eliminate any significant risk that it could force an aircraft into an
14 unrecoverable dive.

15 80. In addition, Boeing successfully lobbied the FAA to waive requirements to add
16 certain cockpit alerts or indicators that would have been required if the MAX were an all-new
17 aircraft. Boeing argued that the costs of adding new indicators and alerts were too high and that
18 such alerts were "impractical" to add to the 50-year old design of the MAX.⁴⁴

19 **3. Boeing Decides Not to Disclose MCAS to Purchasers and Pilots**

20 81. The profit-driven directive for minimal pilot training also created a certification
21

22 ⁴³ This is because the amount of force needed to move an aircraft's control surfaces increases by
23 the square of the airspeed, meaning that if MCAS malfunctioned and pushed the nose down during
24 normal flight, the pilots would have to pull approximately four times harder on the controls to
counteract this as they would at low speed.

25 ⁴⁴ Dominic Gates, Steve Miletech, Lewis Kamb, "Boeing pushed FAA to relax 737 MAX
26 certification requirements for crew alerts" Seattle Times, Oct. 3, 2019 (available at
27 [https://www.seattletimes.com/business/boeing-aerospace/boeing-pushed-faa-to-relax-737-max-
certification-requirements-for-crew-alerts/](https://www.seattletimes.com/business/boeing-aerospace/boeing-pushed-faa-to-relax-737-max-certification-requirements-for-crew-alerts/)) (last accessed Jan. 28, 2021).

1 problem in light of Boeing's incorporation of MCAS.

2 82. Not surprisingly, the FAA requires that pilots learning to fly a new model of aircraft
3 – even a model that is a derivative of an existing model – receive training on each new system
4 installed on the aircraft that could affect flight safety.

5 83. Incorporating a new system also triggers a requirement to develop and publish
6 emergency procedures to deal with the failure of a new system if existing procedures are
7 inadequate.

8 84. Thus, Boeing's engineers were ordered to convince the FAA not to require training
9 specific to MCAS or to MCAS malfunctions.

10 85. To avoid the requirement to inform and train pilots about MCAS, Boeing decided
11 to represent to the FAA that MCAS was benign, would operate in the background, and would only
12 activate in extremely rare circumstances.

13 86. If MCAS malfunctioned, Boeing argued to the FAA, the failure would mimic
14 another type of in-flight failure called a "trim runaway" on which 737 pilots were already trained.

15 87. Thus, argued Boeing, there was no need to provide pilots or purchasers with any
16 information about how MCAS worked or how it might fail. Boeing also appears to have falsely
17 told the FAA or led the FAA to falsely believe that MCAS obtained data from more than one
18 sensor and would rarely, if ever, activate.⁴⁵

19 88. Boeing's assertion that a malfunctioning MCAS would mimic a runaway trim
20 emergency was false. Boeing's own runaway trim procedure defines it as "continuous motion of
21 the trim."

22 89. MCAS does not, however, command "continuous" trim motion; it commands 10
23 second bursts of trim followed by 5 second pauses. Also, unlike a runaway trim, MCAS stops
24

25 ⁴⁵ See Jack Nicas, Natalie Kitroeff, David Gelles, and James Glanz, "Boeing Built Deadly
26 Assumptions Into 737 Max, Blind to a Late Design Change" New York Times June 1, 2019
27 (available at <https://www.nytimes.com/2019/06/01/business/boeing-737-max-crash.html>) (last
accessed Jan. 28, 2021).

operating when the pilot presses the electric trim switch on the control wheel but starts up again the instant the pilot releases the switch. There are other differences as well.

90. Thus, Boeing knew or should have known that these differences made its stated basis for not telling MAX pilots or operators about MCAS and not giving pilots emergency procedures specific to MCAS malfunctions not only untrue but dangerous.

91. Boeing recognized the difficulty of convincing the FAA to allow it to deceive pilots about MCAS. Indeed, a responsible Boeing official is reported to have remarked in an internal email that it would take a “Jedi mind trick” to convince the FAA to go along with this scheme. Later, the same official admitted that he had “basically lied to the regulators (unknowingly)” regarding MCAS.⁴⁶

B. Boeing Markets the MAX to Purchasers Without Disclosing MCAS or the MAX’s Different Flight Characteristics

92. Boeing claimed that the MAX would offer similar benefits as the A320neo, while ensuring that pilots trained on the 737NG would need little or no additional training to operate the MAX.

93. In 2017 at the Paris Air Show (a leading commercial aviation trade show), Boeing’s MAX Chief Pilot, Ed Wilson, asserted that the MAX “is configured to be very common with the NG . . . so a pilot can walk into [the cockpit] and will find everything he can just like he can in the NG. . . . FAA-approved [the MAX] for two-and-a-half hours of computer-based training for the transition between the two aircraft All the overhead panel switches are the same. The only minor difference is, because of the change in the display, is to move some of the center console items here on the forward console.”⁴⁷

⁴⁶ *Id.*

⁴⁷ Gregory Wallace, Drew Griffin and Madeleine Ayer “Boeing promoted 737 MAX as requiring little additional pilot training” CNN, March 22, 2019 (available at <https://www.cnn.com/2019/03/22/politics/boeing-737-manual/index.html>) (last accessed Jan. 28, 2021).

1 94. Wilson did not disclose MCAS or the altered flight dynamics of the MAX.

2 95. There is evidence that Boeing's decision to intentionally omit any disclosures about
3 MCAS to purchasers or pilots was controversial within Boeing.

4 96. On information and belief, Boeing initially included descriptions of MCAS in drafts
5 of material that would be supplied to purchasers and pilots. Later, however, Boeing appears to
6 have carefully scrubbed all mention of MCAS from these documents with one limited exception
7 – descriptions of how to test and repair MCAS were apparently buried deep in MAX maintenance
8 manuals so that mechanics could fix it when it malfunctioned.

9 97. There is evidence that Boeing initially included information about MCAS in the
10 MAX Flight Crew Operating Manual,⁴⁸ but removed it in a later draft.⁴⁹

11 98. Then, as part of the self-described “Jedi mind trick,” the previously-mentioned
12 responsible Boeing official reported to the FAA that Boeing had decided to “delete MCAS” from
13 the Flight Crew Operating Manual,⁵⁰ and the FAA apparently did not object.

14 99. As required by contract, Boeing supplied Smartwings with a Detail Specification,
15 representing that the 100-plus page Detail Specification constituted a detailed and accurate
16 technical description of the aircraft and its systems.

17 100. However, the Detail Specifications failed to mention the existence of MCAS.

18 101. There is some evidence that Boeing's standard Detail Specification was also
19 scrubbed; early versions of it apparently listed MCAS in the table of acronyms but did not use the
20 term anywhere else.

21 _____
22 ⁴⁸ See Michael Laris, Ian Duncan and Lori Aratini, “FAA's lax oversight played part in Boeing
23 737 Max crashes, but agency is pushing to become more industry-friendly” Washington Post,
24 October 28, 2019 (available at https://www.washingtonpost.com/local/trafficandcommuting/faas-lax-oversight-played-part-in-boeing-737-max-crashes-but-agency-is-pushing-to-become-more-industry-friendly/2019/10/27/bc0bf184-f4e1-11e9-ad8b-85e2aa00b5ce_story.html) (last accessed
25 Jan. 28, 2021).

26 ⁴⁹ *Id.*

27 ⁵⁰ *Id.*

1 102. The versions of the Detail Specification provided to Smartwings did not even
2 mention MCAS in the acronym list.

3 103. The MAX was also supposed to include an “AOA Disagree” warning light that
4 illuminated whenever the two AOA sensors gave significantly different readings.

5 104. This light had been standard on the 737NG and pilots were trained about what it
6 meant. However, Boeing has admitted that during the software development for the MAX, it
7 inadvertently deactivated the AOA disagree light in most MAX aircraft.

8 105. Even though Boeing learned of this before either of the fatal crashes, Boeing
9 decided not to inform pilots or purchasers or to fix this admitted defect until its next routine
10 software upgrade 18 months later.⁵¹ Boeing continued to deliver MAX aircraft to customers,
11 including Smartwings, knowing the AOA Disagree system did not work and that the aircraft did
12 not conform to Boeing’s published specifications.

13 106. In sum, Boeing did not disclose MCAS to purchasers or pilots, including
14 Smartwings.

15 107. Boeing did not include references to MCAS or MCAS failures in any of the
16 operations documentation or normal or emergency procedures manuals for the MAX.⁵²

17 108. Boeing did not disclose to purchasers or pilots the potentially catastrophic effects
18 of an MCAS failure. Nor did Boeing disclose to purchasers or pilots that Boeing masked problems
19 with the design of the MAX with “band aids” such as MCAS, or that those “band aids” were
20 improperly designed and insufficiently tested in Boeing’s rush to get the MAX to market to
21 compete with the A320neo.

22 109. Boeing oversold the benefits of the MAX while underplaying, denying, or failing

23 ⁵¹ Dominic Gates, “Long before first 737 MAX crash, Boeing knew a key sensor warning light
24 wasn’t working, but told no one,” Seattle Times, May 5, 2019 (available at
25 [https://www.seattletimes.com/business/boeing-aerospace/long-before-first-737-max-crash-
boeing-knew-a-key-sensor-warning-light-wasnt-working-but-told-no-one](https://www.seattletimes.com/business/boeing-aerospace/long-before-first-737-max-crash-boeing-knew-a-key-sensor-warning-light-wasnt-working-but-told-no-one)) (last accessed Jan. 28,
26 2021).

27 ⁵² *Id.*

1 to disclose material dangers. This is consistent with Boeing's self-described practice of having its
2 sales force "lie [to purchasers] about how awesome our airplanes were."⁵³

3 **C. Boeing Uses Misrepresentations About the MAX To Convince Smartwings To**
4 **Purchase or Lease 39 MAXs And To Transition to an all-MAX Fleet**

5 110. When Boeing began selling the 737-8 aircraft (the "MAX") to Smartwings and
6 other potential customers, Boeing marketed it as a new and improved version of its venerable 737.

7 111. At the same time, Boeing repeatedly reassured Smartwings, other customers, and
8 the worldwide aviation community that the MAX would retain the basic design and "unparalleled"
9 safety record of the 737NG, the 737's previous version.

10 112. Boeing represented that pilots qualified to fly the 737NG would need only minimal
11 transition training for the MAX. Boeing specifically told Smartwings, and likely others, that
12 "Cockpit commonality [from NG to MAX] results in no requirement for a new MAX simulator."

13 113. Boeing represented that the MAX Aircraft would not require pilot training in a
14 simulator.

15 114. Boeing also represented that the training to transition pilots from the 737NG to the
16 MAX would be one day of Level B training, which is computer-based training or classroom
17 instruction.

18 115. Boeing needed to make these representations about the MAX in order to compete
19 with Airbus's A320neo and to hasten the MAX's regulatory approval.

20 116. Based on Boeing's claims about the characteristics, reliability, and safety of the
21 MAX, Smartwings committed to introduce MAX to its existing 737 fleet with the goal that its fleet
22 would ultimately consist entirely of MAX aircraft.

23 117. Smartwings selected MAX over rival products relying on Boeing's representations

24 ⁵³ Michael Laris "Messages show Boeing employees knew in 2016 of problems that turned deadly
25 on the 737 Max" The Washington Post, Oct. 18, 2019 (available at
26 https://www.washingtonpost.com/local/trafficandcommuting/text-messages-show-boeing-employees-knew-in-2016-of-problems-that-turned-deadly-on-the-737-max/2019/10/18/8578c990-flca-11e9-89eb-ec56cd414732_story.html) (last accessed Jan. 28, 2021).
27

1 and made further and long-term plans to solidify its all-Boeing fleet plan.

2 118. Smartwings' decision to commit the company to a majority MAX fleet was based
3 on repeated representations by Boeing about the quality of the MAX aircraft, of Boeing's
4 "superior" product support, that the MAX was an improved update to the 737NG, which would
5 otherwise operate like a 737NG and require little or no additional training for pilots qualified to
6 operate the 737NG.

7 119. Also, Smartwings believed and was influenced by Boeing's express or implied
8 representations that the MAX would maintain or exceed the 737NG's reputation for safety and
9 reliability.

10 120. For example, in 2014, Boeing's publication Aero touted the MAX as offering
11 "improved fuel efficiency and reduced emissions and noise while extending the 737's reputation
12 for reliability and retaining commonalities with the current 737 fleet."⁵⁴

13 121. Boeing also proudly publishes an annual survey on aircraft safety. For the last
14 several years, it has highlighted statistics indicating that the 737NG is the safest aircraft of its type
15 in existence.⁵⁵

16 122. Boeing repeatedly represented directly to Smartwings that MAX was superior
17 because of its reliability, efficiency, and the minimum request for additional pilot training.

18 123. On or about June 13, 2016, Boeing expressly instructed Smartwings that the
19 difference in training from 737NG to MAX would take only one day and would require no full
20

21 ⁵⁴ Michael Teal, Vice President and Chief Project Engineer, 737 MAX "New 737 MAX: Improved
22 Fuel Efficiency and Performance" Issue 53, Quarter 01, 2014 at p. 7 (available at
23 https://www.boeing.com/commercial/aeromagazine/articles/2014_q1/pdf/AERO_2014q1.pdf)
(last accessed Jan. 28, 2021).

24 ⁵⁵ Statistical Summary of Commercial Jet Airplane Accidents: Worldwide Operations 1950-2017,
25 p. 19 (table of Accident Rate by Airplane Type) (available at
26 https://www.boeing.com/resources/boeingdotcom/company/about_bca/pdf/statsum.pdf) (last
27 accessed Jan. 28, 2021). The summary shows that of all aircraft that have had at least one accident,
the 737NG's have the lowest accident rate of any model in the world except for one much smaller
Brazilian-made regional jet.

1 flight simulator training. Boeing proudly stated that choosing the MAX provided Smartwings with
2 the “most cost effective transition solution with minimal training investment.”

3 124. And, in or around December 2017, Boeing touted to Smartwings the “MAX
4 reliability” of “less maintenance, higher reliability, fewer days out of service” and the “737 MAX
5 advantage” as higher efficiency, reliability, and passenger appeal than the 737NG or A320neo. It
6 also gave Smartwings assurances that “737 flight crews will feel at home in the MAX.”

7 125. Smartwings had historically operated a mix of aircraft types. However, Boeing’s
8 promises and representations about the MAX convinced Smartwings to purchase or lease 45 new
9 MAX’s between 2018 and 2023, and to phase out most or all of its other aircraft to become an all-
10 MAX airline.

11 126. This made Smartwings particularly reliant on the MAX being both safe and on time
12 – a reliance that Boeing was well aware of and actively encouraged.

13 127. Smartwings agreed to buy some of its MAXs outright, and to lease others from third
14 parties. Under the latter arrangement, a lessor would purchase the new aircraft, then immediately
15 lease it to Smartwings pursuant to pre-negotiated terms and conditions.

16 128. Boeing knew that these leased aircraft were going to Smartwings given that Boeing
17 would install Smartwings’ custom equipment in the leased aircraft, would paint them in
18 Smartwings’ livery, and would deliver them directly to Smartwings.

19 129. Boeing, Smartwings, and the lessor would also sign an “assignment agreement” in
20 a form prepared by Boeing that gave Smartwings certain direct contractual rights against Boeing.

21 130. Smartwings obtained the MAX aircraft in reliance on Boeing’s false assurances
22 that the MAX was “as safe as any airplane that has ever flown the skies,” and trusting that Boeing
23 had disclosed all material information about the design and operation of the MAX to customers
24 and regulators.

25 131. Smartwings’ pilots and executives were unaware of and could not reasonably have
26 learned about the dangers posed by MCAS and Boeing’s negligent design.

27 132. Boeing was to supply Smartwings with a total of 16 MAXs by June 2019 for use

1 during Smartwings' peak travel season of 2019.

2 133. Seven of these aircraft were delivered to Smartwings prior to the March 2019
3 worldwide grounding of the MAX. The remaining nine were never delivered.

4 134. Smartwings planned for and was on track to utilize these 16 aircraft heavily. By
5 March 2019, Smartwings had already sold almost all capacity either directly to customers or via
6 travel agencies. Smartwings also agreed to purchase and/or lease another twenty-three MAXs
7 between late 2019 and 2022-23.⁵⁶

8 135. Smartwings' MAXs sat unused and unusable until February 25, 2021, when it was
9 permitted to begin operating them in Europe.

10 **D. Two Tragic MAX Crashes, Smartwings' Plea to Boeing, and the Subsequent**
11 **Grounding of the MAX**

12 136. On October 28, 2018, Lion Air Flight 610 crashed into the Java Sea about 11
13 minutes after takeoff from Jakarta, Indonesia, killing all 189 passengers and crew on board.

14 137. Unbeknownst to the cockpit crew, the single AOA sensor on the pilot's side that
15 provided data for that flight "told" MCAS that the aircraft was stalled even though it was not. The
16 copilot-side sensor was working normally and was providing accurate information, but MCAS's
17 single-sensor design ignored the properly working AOA sensor.

18 138. As a result, MCAS engaged to force the aircraft's nose sharply down approximately
19 26 times. The crew fought to counteract MCAS with electric and manual application of nose-up
20 trim and were successful the first 22 times. However, they were eventually overcome by MCAS
21 and the aircraft dove into the sea taking the lives of everyone on board.⁵⁷

22
23 ⁵⁶ As indicated above, Boeing sold Smartwings another five aircraft for delivery in 2022-23 that
24 are not at issue in this lawsuit.

25 ⁵⁷ Dominic Gates and Lewis Kamb, "Indonesia's devastating final report blames Boeing 737 MAX
26 design, certification in Lion Air crash" Seattle Times, Oct. 27, 2019 (available at
27 <https://www.seattletimes.com/business/boeing-aerospace/indonesias-investigation-of-lion-air-737-max-crash-faults-boeing-design-and-faa-certification-as-well-as-airlines-maintenance-and-pilot-errors/>) (last accessed Jan. 28, 2021).

139. Not knowing that MCAS even existed, not having emergency procedures appropriate for an MCAS failure, and not even having an AOA disagree light that might have identified the problem, it is no surprise that the crew would have been confused about why the aircraft was continually trying to force itself into a fatal dive for no apparent reason.⁵⁸

140. After the crash of Lion Air Flight 610, and possibly earlier, Boeing knew that there were major defects with MCAS that it would need to fix with a software update. As noted above, Boeing also knew as of 2017 – a year before the crash of Lion Air Flight 610 – that it had mistakenly disabled the AOA Disagree alert on many MAX aircraft.⁵⁹

141. On November 6, 2018, Boeing issued Flight Crew Operations Manual Bulletin No. TBC-19 to MAX pilots and operators.

142. Apparently still wishing to keep up its deception about MCAS, Boeing carefully drafted the bulletin to not directly mention MCAS even though the Lion Air Flight 610 crash had provided strong evidence that purchasers and pilots needed to know about this system and its propensity to malfunction.

143. Boeing also issued public statements suggesting that the Lion Air crash had been caused by pilot error because the crew had apparently not mis-diagnosed the failure as a trim runaway the way Boeing had represented to the FAA that pilots would. These statements ignored the real problem, which was that Boeing had not only created a dangerous system with a high potential for catastrophic malfunction, but had been swayed by economic forces to not even give

⁵⁸ Jamie Freed, Eric M. Johnson, “Optional warning light could have aided Lion Air engineers before crash: experts” Reuters, Nov. 29, 2018 (available at <https://www.reuters.com/article/us-indonesia-crash-boeing-aoa/optional-warning-light-could-have-aided-lion-air-engineers-before-crash-experts-idUSKCN1NZ0QL>) (last accessed Jan. 28, 2021); Boeing Press Release, “Boeing Statement on AOA Disagree Alert,” (available at <https://boeing.mediaroom.com/news-releases-statements?item=130431>) (last accessed Jan. 28, 2021).

⁵⁹ Patricia DiCarlo, Emanuella Grinberg and Ross Levitt, “Boeing knew about problems with the 737 Max the year before Lion Air crash and did nothing about them” CNN.com, May 7, 2019 (available at <https://www.cnn.com/2019/05/05/us/boeing-737-max-disagree-alert/index.html>) (last accessed Jan. 28, 2021).

1 pilots the tools they needed to deal with such a malfunction.

2 144. This time, the FAA did not entirely accept Boeing's continuing efforts to deceive
3 customers and pilots about MCAS.

4 145. On November 8, 2018, the FAA issued an Emergency Airworthiness Directive
5 ordering Boeing to correct its omissions:

6 This emergency AD was prompted by analysis performed by the
7 manufacturer showing that if an erroneously high single AOA
8 sensor input is received by the flight control system, there is a
9 potential for repeated nose-down trim commands of the horizontal
10 stabilizer. This condition, if not addressed, could cause the flight
11 crew to have difficulty controlling the airplane, and lead to
12 excessive nose-down attitude, significant altitude loss, and possible
13 impact with terrain.

14 * * * *

15 We are issuing this AD because we evaluated all the relevant
16 information and determined the unsafe condition described
17 previously is likely to exist or develop in other products of the same
18 type design. Due to the need to correct an urgent safety of flight
19 situation, good cause exists to make this AD effective in less than
20 30 days.

21 146. The Emergency Airworthiness Directive ordered Boeing to modify its manual on
22 the MAX to include specific warnings and instructions on procedures to respond to an erroneously
23 triggered MCAS.

24 147. Two days after the Emergency Airworthiness Directive was issued, Boeing sent a
25 two-paragraph email to "all 737NG/MAX Customers, Regional Directors, Regional Managers and
26 Boeing Field Service Bases."⁶⁰

27 148. The email was the first disclosure of the existence of MCAS to purchasers and
pilots. Notwithstanding the Emergency Airworthiness Directive and this email, Boeing did not
update the flight manual with appropriate procedures to deal with MCAS malfunctions.

149. Even Boeing's emergency directive was a half-measure. It stated that pilots "can"

⁶⁰ See Republic of Indonesia, "Preliminary Aircraft Accident Investigation Report", at 53
(available at https://reports.aviation-safety.net/2018/20181029-0_B38M_PK-LQP_PRELIMINARY.pdf) (last accessed Jan. 28, 2021).

1 use electric trim switches on the control column prior to hitting cutout switches to disable the
 2 MCAS program.⁶¹ But that unprecise instruction, coupled with the undisclosed and flawed design
 3 of MCAS, proved insufficient to prevent another disaster.

4 150. Smartwings also expressed concern directly to Boeing after the Lion Air Flight 610
 5 crash. On November 27, 2018, Smartwings' CFO, Mr. Jiri Juran, sent Boeing a letter expressing
 6 doubt about Boeing's claim that the Lion Air accident was due purely to pilot error.

7 151. The letter described Boeing's reaction to the Lion Air crash as "passive,"
 8 "indifferent," and consisting of "words" rather than "effective support" and suggesting that "the
 9 Boeing Company is not aware of its global social responsibility" The letter noted that
 10 Smartwings' pilots and passengers were concerned about the MAX's safety, and that Mr. Juran
 11 was very frustrated with Boeing's lack of action. The letter concluded, "Only sweet words are not
 12 solution of the situation."

13 152. Boeing did not unilaterally ground the MAX after the Lion Air crash, and it did not
 14 disclose to purchasers that the MAX had inherently dangerous faults, likely because it did not want
 15 to face increased legal liability, bad publicity, and order cancellations that would result from a
 16 grounding.

17 153. To avoid more suspicions like those expressed by Mr. Juran, Boeing even issued a
 18 press release after the Lion Air crash that hinted Lion Air's pilots and mechanics were at fault.
 19 The press release failed to disclose that Boeing knew MCAS was defective and dangerous, and
 20 instead stated that "the MAX is as safe as any airplane that has ever flown the skies."⁶²

21 154. In February 2019, as the March 2019 delivery date of the next direct purchase
 22 aircraft (Aircraft 60134) approached, Mr. Juran sent Boeing an email reiterating Smartwings'

23 ⁶¹ See Seattle Times Staff, "Two tragic flights, 12 problems," Seattle Times, Oct. 27, 2019
 24 (available at <https://projects.seattletimes.com/2019/boeing-737-max-12-problems/>) (last accessed
 25 Jan. 28, 2021).

26 ⁶² Boeing Press Release, "Boeing Statement on Lion Air Flight 610 Preliminary Report" (available
 27 at <https://boeing.mediaroom.com/news-releases-statements?item=130336>) (last accessed Jan. 28,
 2021).

1 safety concerns. It also stated that Smartwings would not accept delivery of any more aircraft until
2 Boeing provided an official reply to the November 27, 2018 letter.

3 155. Boeing never provided a substantive response regarding the safety issues, but did
4 respond that it “expected” Smartwings to take delivery because this was required by contract.

5 156. On March 10, 2019, Ethiopian Air Flight 302 crashed about six minutes after
6 takeoff from Addis Ababa, Ethiopia, killing all 157 passengers and crew on board.

7 157. Like Lion Air Flight 610, Ethiopian Air Flight 302 crashed when MCAS
8 persistently engaged due to the failure of one of the aircraft’s two AOA sensors.⁶³

9 158. Throughout the flight one AOA sensor worked normally, but the other sensor (the
10 pilot-side sensor MCAS was relying on as the sole source of data) was reporting an angle of attack
11 reading of 75 degrees or more.

12 159. Even though it is a physical impossibility for a 737 MAX to ever have an angle of
13 attack of 75 degrees during flight, the flawed MCAS software interpreted this impossible reading
14 as a near stall condition and aggressively pushed the nose down.

15 160. There is evidence that the pilots successfully hit the cutout switches to disable
16 MCAS but did not first use the thumb switches to ease forces on the horizontal tail—showing that
17 Boeing’s emergency directive mentioning this as an optional step was completely inadequate.

18 161. By that time, the downward control forces commanded by MCAS were so strong
19 that the pilots did not have enough strength in their arms to manually counteract them and prevent
20 the fatal crash.⁶⁴

21 162. Smartwings realized immediately after this crash that its warning and pleas to
22

23 ⁶³ See Dominic Gates and Mike Baker, “The inside story of MCAS: How Boeing’s 737 MAX
24 system gained power and lost safeguards” Seattle Times, June 24, 2019 (available at
25 <https://www.seattletimes.com/seattle-news/times-watchdog/the-inside-story-of-mcas-how-boeings-737-max-system-gained-power-and-lost-safeguards/>) (last accessed Jan. 28, 2021).

26 ⁶⁴ See Seattle Times Staff, “Two tragic flights, 12 problems,” Seattle Times, Oct. 27, 2019
27 (available at <https://projects.seattletimes.com/2019/boeing-737-max-12-problems/>) (last accessed Jan. 28, 2021).

Boeing from the previous November had gone unheeded.

163. A few hours after the Ethiopian Air crash, Mr. Juran sent Boeing an email stating that Smartwings would not accept any more MAX aircraft until the MAX was certified to be safe. The email concluded with the statement, “Your measures and recommendations are impatiently expected!!!!!!!!!!”

164. When the European aviation regulators grounded the MAX two days later, Mr. Juran wrote again to Boeing regarding the November 27, 2018 letter. The email stated:

Our warnings and complaints you took lightly. You had a lot of chances and possibilities to adopt reactive actions. I am not happy from that. It is a sad story. It is a pity that I was absolutely right . . .

165. In addition to the grounding order by European regulators, nearly every regulatory body in the world grounded the MAX within a few days of the Ethiopian Air crash. The FAA was one of the last to do so, issuing its grounding order on March 13, 2019.

166. Boeing issued a statement stating it agreed with this decision and that it would “deploy safety enhancements” to ensure that a similar crash does not happen again.⁶⁵

E. Boeing Admits That MCAS Malfunctions Carry Significant Risk and That Boeing Is Responsible for Correcting MCAS

167. On April 4, 2019, Boeing’s CEO admitted that MCAS likely activated in response to erroneous AOA information in both the Lion Air Flight 610 and Ethiopian Air Flight 302 crashes. He also admitted that it was Boeing’s responsibility to “eliminate the risk” of erroneous activation of the MCAS function.⁶⁶

168. Even with such admissions, Boeing continued to misleadingly characterize the

⁶⁵ Boeing Press Release, “In Consultation with the FAA, NTSB and its Customers, Boeing Supports Action to Temporarily Ground 737 MAX Operations” Mar. 13, 2019 (available at <https://boeing.mediaroom.com/news-releases-statements?item=130404>) (last accessed Jan. 28, 2021).

⁶⁶ See “USA: Boeing CEO admits flight system played role in deadly 737 Max air crashes” April 5, 2019 (available at <https://www.youtube.com/watch?v=iUeo4248wpl>) (last accessed Jan. 28, 2021).

needed fix to MCAS as a “software enhancement” to “reduce pilot workload.” Boeing also issued a statement attempting to blame MCAS’s defects on a subcontractor.⁶⁷

169. After the crash of Ethiopian Air Flight 302, Boeing also revealed that it had been developing a software patch that attempted to fix MCAS’s dangerous tendencies for several months.

170. In order to obtain certification for the MAX and return it to service, Boeing has agreed that numerous significant changes to the MAX were required, including:

a. Installing new flight control computer software to prevent erroneous MCAS activation;

b. Installing updated cockpit display system software to generate an AOA Disagree alert that will inform pilots that the airplane’s AOA sensors have a potential sensor failure;

c. Incorporate new and revised operating procedures into the Airplane Flight Manual; and

d. Changing the routing of horizontal stabilizer trim wires to bring the airplane into full compliance with the FAA’s wire-separation safety standards.⁶⁸

171. All of these are features that a reasonable aircraft manufacturer in Boeing’s position would have incorporated into the MAX before delivering the aircraft to Smartwings or to any MAX purchasers, and before allowing any passenger to board a MAX aircraft.

172. Boeing should also have ranked an MCAS failure as “Catastrophic” from the very beginning. This would have triggered a requirement that Boeing use multiple sensor inputs and

⁶⁷ “Boeing Statement on 737 MAX Software,” June 26, 2019 (available at <https://boeing.mediaroom.com/2019-06-26-Boeing-Statement-on-737-MAX-software>) (last accessed Jan. 28, 2021).

⁶⁸ Department of Transportation, FAA, Airworthiness Directive to Boeing, 14 CFR Part 39, issued November 18, 2020 (available at https://www.faa.gov/foia/electronic_reading_room/boeing_reading_room/media/737_AD_2019-NM-035fr.pdf) (accessed April 1, 2020).

1 other redundancies it now concedes are necessary and would have avoided the accidents and the
2 grounding.

3 173. As Boeing has worked to fix MCAS, other serious problems with the MAX
4 continue to surface. For example, in February 2020, the FAA announced that Boeing would need
5 to fix another software problem before the MAX would be recertified. The problem involves an
6 indicator warning light for the MAX's stabilizer-trim system, which erroneously activates when
7 the system is not active. This problem had been created by Boeing's changes to the way the
8 aircraft's flight control computers handle incoming data.⁶⁹

9 174. More recently, the FAA required Boeing to redesign the entire operation of the
10 aircraft's two flight control computers so that both computers remain active during each flight and
11 warn pilots if the data inputs to the two computers disagree.

12 175. Regulators also discovered dangerous flaws in the wiring going to electronic
13 control components in the aircraft's tail.

14 176. Finally, inspection discovered numerous tools and other items that Boeing workers
15 had carelessly dropped into fuel tanks and other enclosures within the aircraft.

16 **F. Ongoing Investigations and Disclosures Being to Reveal Boeing's Deceptive and**
17 **Fraudulent Practices**

18 177. In addition to the public reporting cited throughout this Complaint, Boeing's
19 development of the MAX has been or is being investigated by committees in the United States
20 House of Representatives and Senate, the Department of Transportation, the Department of Justice,
21 and the Securities and Exchange Commission, and is subject to private litigation from crash
22 victims' families, Boeing shareholders, Boeing customers, and airline pilots.⁷⁰

23 ⁶⁹ Alan Levin, Siddharth Philip, and Christopher Jasper, "Boeing fixing new software bug on 737
24 MAX; key test flight nears," Seattle Times, Feb. 6, 2020 (available at
25 <https://www.seattletimes.com/business/boeing-fixing-new-software-bug-on-737-maxkey-test-flight-nears/>) (last accessed Jan. 28, 2021).

26 ⁷⁰ Sinead Baker, "Here are all the investigations and lawsuits that Boeing and the FAA are facing
27 after the 737 Max crashes killed almost 350 people," Business Insider, June 24, 2019 (available at
<https://www.businessinsider.com/boeing-737-max-crisis-list-lawsuits-investigations-faces-faa->

1 178. Despite the intense scrutiny and the important public interest questions raised about
2 the development and airworthiness of the MAX, many of the facts of the MAX's development
3 have been kept in Boeing's or investigators' hands and away from the public and from Smartwings.

4 179. But the documents that have been publicly released show that Boeing knowingly
5 concealed from customers and pilots the existence of MCAS and other differences between the
6 737NG and the MAX.

7 180. They also display Boeing's push to avoid simulator or other extensive training due
8 to marketing and economic pressures. Smartwings reasonably believes that future disclosures, and
9 discovery, will further confirm Boeing's wrongful conduct. The following paragraphs describe
10 the most recently released revelations.

11 181. When Lion Air—one of the first MAX operators—sought to require simulator
12 training for pilots transitioning to the MAX, a Boeing employee encouraged the airline to drop this
13 requirement. Instead, Boeing suggested that Lion Air adopt “less effective alternatives such as
14 requiring flight time in previous models of the 737, or ensuring that a pilot's first MAX flight was
15 alongside a pilot with MAX experience.”⁷¹

16 182. The same Boeing official also stated that “there is absolutely no reason to require
17 your pilots to require a MAX simulator to begin flying the MAX. Once the engines are started,
18 there is only one difference between NG and MAX procedurally, and that is that there is no OFF
19 position of the gear handle. Boeing does not understand what is to be gained by a three-hour
20 simulator session, when the procedures are essentially the same.”⁷²

21 183. These representations were false or misleading at the time they were made. Boeing
22 was highly motivated to convince Lion Air to forego simulator training given that Lion Air's MAX

23 _____
24 [2019-5](#)) (accessed Jan. 28, 2021).

25 ⁷¹ Sean Broderick, “Boeing Fought Lion Air On Proposed MAX Simulator Training Requirement”
26 Reuters, Jan. 10, 2020 (available at <https://aviationweek.com/air-transport/boeing-fought-lion-air-proposed-max-simulator-training-requirement>) (last accessed Jan. 28, 2021).

27 ⁷² *Id.*

1 training decisions would likely influence those of other MAX operators.⁷³

2 184. In December 2019, Boeing released a small trove of “very disturbing” documents
3 to the FAA and congressional investigators in a document dump just before end-of-year holidays.⁷⁴

4 185. At least some of those documents were eventually made public in partially redacted
5 form. They showed that Boeing employees mocked federal rules and talked about deceiving
6 federal regulators about the MAX.⁷⁵

7 186. For example, in 2015, a Boeing employee said in an internal message that a
8 presentation to the FAA about the MAX was so complicated that the agency officials watching it
9 looked “like dogs watching TV.”⁷⁶

10 187. In 2017, a Boeing employee wrote in an internal message about the MAX that “this
11 airplane is designed by clowns, who are in turn supervised by monkeys.”⁷⁷ A Boeing employee
12 wrote in 2018 that “I still haven’t been forgiven by God for the covering up I did last year,”
13 apparently referring to Boeing’s interactions with the FAA about MCAS.⁷⁸

14 188. The documents also show the intense pressure exerted by Boeing to prevent
15 simulator training for pilots in keeping with its money-driven goals.

16 189. In March 2017, Boeing’s 737 Chief Technical Pilot wrote, “I want to stress the
17 importance of holding firm that there will not be any type of simulator training required to

18 ⁷³ *Id.*

19 ⁷⁴ Steve Miletich and Dominic Gates, “Boeing documents sent to House committee called ‘very
20 disturbing,’” Seattle Times, Dec. 23, 2019 (available at [https://www.seattletimes.com/
21 business/boeing-aerospace/boeing-documents-sent-to-house-committee-called-very-disturbing/](https://www.seattletimes.com/business/boeing-aerospace/boeing-documents-sent-to-house-committee-called-very-disturbing/))
(last accessed Jan. 28, 2021).

22 ⁷⁵ Natalie Kitroeff, “Boeing Employees Mocked F.A.A. and ‘Clowns’ Who Designed 737 Max,”
23 New York Times Jan. 9, 2020 (available at [https://www.nytimes.com/2020/01/09/business/
24 boeing-737-messages.html](https://www.nytimes.com/2020/01/09/business/boeing-737-messages.html)) (last accessed Jan. 28, 2021).

25 ⁷⁶ *Id.*

26 ⁷⁷ *Id.*

27 ⁷⁸ *Id.*

1 transition from NG to MAX. Boeing will not allow that to happen. We'll go face to face with any
2 regulator who tries to make that a requirement.”⁷⁹

3 190. It was not until January 2020 that Boeing finally dropped its year-long insistence
4 that 737 pilots do not need simulator training to transition to the MAX and sent a letter to all MAX
5 operators stating that it now agreed that MAX-specific simulator training should be required.⁸⁰

6 191. Finally, the documents made public in December 2019 revealed that as early as
7 2013, Boeing officials recognized that disclosing MCAS's existence to customers would result in
8 “a greater certification and training impact.” These documents map out Boeing's strategy of
9 deception about MCAS, for example directing that it could be referred to by name only within
10 Boeing, but to the outside world directing that it be called an “addition to speed trim.”⁸¹

11 192. The FAA Inspector General issued a report, dated June 29, 2020, confirming that
12 Boeing provided only limited information on MCAS to the FAA during the certification process
13 and downplayed the significance of MCAS's addition as merely a “modification to the existing
14 speed trim system.”

15 193. Boeing also failed to disclose early internal analyses and data showing that certain
16 MCAS failures and the corresponding pilot reaction times would be “catastrophic,” and Boeing
17 never fulfilled its duty to disclose to the FAA that these failures should be reclassified from the
18 less-serious classifications Boeing had initially given it. Boeing justified its request to keep any
19

20 ⁷⁹ Jamie Freed and Tracy Rucinski, “Factbox: In Boeing internal messages, employees distrust
21 the 737 MAX and mock regulators,” Reuters, Jan. 9, 2020 (available at [https://www.reuters.com/
22 article/us-boeing-737max-factbox/factbox-in-boeing-internal-messages-employees-distrust-the-
737-max-and-mock-regulators-idUSKBN1Z90NP](https://www.reuters.com/article/us-boeing-737max-factbox/factbox-in-boeing-internal-messages-employees-distrust-the-737-max-and-mock-regulators-idUSKBN1Z90NP)) (last accessed Jan. 28, 2021).

23 ⁸⁰ Natalie Kitroeff and David Gelles, “Boeing Will Recommend 737 Max Flight Simulator
24 Training for Pilots,” New York Times, Jan. 7, 2020 (available at [https://www.nytimes.com/
2020/01/07/business/boeing-737-max-simulator-training.html](https://www.nytimes.com/2020/01/07/business/boeing-737-max-simulator-training.html)) (last accessed Jan. 28, 2021).

25 ⁸¹ Jamie Freed and Tracy Rucinski, “Factbox: In Boeing internal messages, employees distrust
26 the 737 MAX and mock regulators,” Reuters, Jan. 9, 2020 (available at [https://www.reuters.com/
27 article/us-boeing-737max-factbox/factbox-in-boeing-internal-messages-employees-distrust-the-
737-max-and-mock-regulators-idUSKBN1Z90NP](https://www.reuters.com/article/us-boeing-737max-factbox/factbox-in-boeing-internal-messages-employees-distrust-the-737-max-and-mock-regulators-idUSKBN1Z90NP)) (last accessed Jan. 28, 2021).

1 mention of MCAS out of MAX training manuals by falsely claiming that MCAS would be
2 “transparent” to the flight crew.

3 194. The Inspector General also noted that internal Boeing evidence established that
4 “reduced level of training [for MAX pilots] was a Boeing program goal for the 737 MAX.”⁸²

5 195. In September 2020, the House Committee on Transportation and Infrastructure
6 issued its report entitled “The Design, Development, and Certification of the Boeing 737 MAX.”
7 The extensive report identifies a “disturbing pattern of technical miscalculations and troubling
8 management misjudgments” by Boeing arising out of five thematic areas across the MAX’s
9 development: (1) production pressure to compete with Airbus; (2) faulty design and performance
10 assumptions; (3) a “culture of concealment” at Boeing; (4) the failure of Boeing employees
11 designated as FAA “authorized representatives” to disclose MCAS concerns to the FAA; and (5)
12 Boeing’s ability to obtain favorable decisions from FAA management over the objections of the
13 FAA’s own technical experts. The Committee concluded Boeing “gambled with the public’s
14 safety” between crashes as it concealed the true nature of its flawed design from the flying public
15 while hundreds of MAXs were in service.⁸³

16 196. On January 21, 2021, Boeing and the United States Attorney’s Office for the
17 Northern District of Texas entered into a Deferred Prosecution Agreement (“DPA”). In the DPA,
18 Boeing admits that its test pilots identified faults with MCAS but that Boeing concealed this
19 information and deceived the FAA about the nature of MCAS. Because of this deceit, the FAA

20 ⁸² See Office of Inspector General, Timeline of Activities Leading to the Certification of the
21 Boeing 737 Max 8 Aircraft and Actions Taken After the October 2018 Lion Air Accident (the
22 “Inspector General’s Report”), available at <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Boeing%20737%20MAX%20Certification%20Timeline%20Final%20Report.pdf> (last accessed Jan. 28, 2021).

23
24
25 ⁸³ House Committee on Transportation & Infrastructure, Final Committee Report, The Design,
26 Development & Certification of the Boeing 737 MAX (available at [https://transportation.house.gov/imo/media/doc/2020.09.15%20FINAL%20737%20MAX%20Re](https://transportation.house.gov/imo/media/doc/2020.09.15%20FINAL%20737%20MAX%20Report%20for%20Public%20Release.pdf)
27 [port%20for%20Public%20Release.pdf](https://transportation.house.gov/imo/media/doc/2020.09.15%20FINAL%20737%20MAX%20Report%20for%20Public%20Release.pdf)) (last accessed March 9, 2021).

deleted all information about MCAS from the final version of the 737 MAX Flight Standardization Board Report published in July 2017. In turn, 737 MAX manuals and pilot training materials lacked information about MCAS, leaving customers and pilots alike without critical safety information on the system or how to address a system malfunction.

197. On February 23, 2021, the FAA Inspector General issued a subsequent report on the FAA's Certification and Delegation Process for the 737 MAX. While the report focused on the FAA's actions, the Inspector General noted several instances of Boeing's failure to completely and fully inform the FAA about "significant changes to MCAS." Boeing also omitted key information in its safety analyses, including "assumptions related to how pilots would react to erroneous MCAS activation and the impact of not reacting in a timely manner."⁸⁴

198. Boeing's executive leadership and Board of Directors were responsible for overseeing the MAX's development and the safety of Boeing's aircraft design and manufacturing processes. Boeing's Board monitored the progress of MAX through briefings at its regular meetings as well as other communications. Boeing's executive leadership and Board knew of the problems with MCAS and either willfully concealed those facts from customers, regulators, and the flying public to boost the company's profits or were negligent in their oversight of Boeing's operations.

G. Severe Impact of Accidents and MAX Defects on Smartwings

199. Relying on Boeing's claims about the characteristics, reliability, and safety of the MAX, Smartwings decided to purchase MAX aircraft from Boeing.

200. Each of Smartwings' Agreements provide in relevant part that "Boeing will manufacture the Aircraft to conform to the appropriate Type Certificate issued by the United States Federal Aviation Administration (FAA) and European Aviation Safety Agency (EASA) for the

⁸⁴ U.S. Dept. of Transportation, Office of Inspector General, Weaknesses in FAA's Certification and Delegation Processes Hindered Its Oversight of the 737 MAX 8, dated Feb. 23, 2021 (available at <https://www.oig.dot.gov/sites/default/files/FAA%20Certification%20of%20737%20MAX%20Boeing%20II%20Final%20Report%5E2-23-2021.pdf>) (accessed April 1, 2021).

1 specific model of aircraft and will obtain from the FAA and furnish to Customer at delivery of
2 each aircraft either a Standard Airworthiness Certificate or an Export Certificate of Airworthiness
3 issued pursuant to Part 21 of the Federal Aviation Regulations.” Boeing did not comply with these
4 requirements.

5 201. While Boeing supplied Airworthiness Certificates at the time of delivery of
6 Smartwings’ MAXs, they were obtained by deception and have since been withdrawn.

7 202. The Purchase Agreements further entitled Smartwings to contract termination,
8 damages, and the refund of advance deposit should Boeing fail to deliver an aircraft because of a
9 “Non-Excusable Delay” within 180 days of the scheduled delivery date.

10 203. Prior to tendering each of the aircraft for delivery to Smartwings, Boeing assured
11 Smartwings and other purchasers and pilots that the aircraft and all other MAX aircraft were safe
12 to operate, even after the crash of Lion Air Flight 610. This was not true.

13 204. If Smartwings had known about MCAS, the design changes of the MAX that
14 required the use of MCAS, the risks that Boeing’s design modifications imposed, or Boeing’s
15 improper conduct it would not have purchased or leased the MAX aircraft and would not have
16 accepted delivery of the aircraft.

17 205. Through either direct purchases or leases, Smartwings took delivery of seven
18 MAXs. Smartwings accepted delivery of the MAX aircraft without knowledge of MCAS’s or the
19 MAX’s safety problems, or the ability to discover on its own what Boeing failed to disclose.

20 206. Due to Boeing’s misconduct resulting in the accidents, the grounding, and Boeing’s
21 inability to deliver the aircraft it had promised to deliver, Smartwings has been unable to use the
22 MAXs for their intended purposes.

23 207. It will be extremely difficult for Boeing to rebuild airline, pilot, and consumer trust
24 after the Lion Air and Ethiopian crashes and after Boeing’s inability to fix the MAX for months
25 or years – particularly due to recent revelations suggesting reckless disregard and deliberate
26 misconduct by Boeing. This leaves the value of the aircraft substantially diminished even after
27 Boeing’s repairs.

1 208. As a result of Boeing's inducement of Smartwings to select MAX as its fleet aircraft
2 and Boeing's other wrongful conduct, Smartwings has incurred significant damages.

3 209. Smartwings' damages included lost revenue for cancelled flights, diminution of
4 value of the aircraft, payment obligations to lessors, reduced credit and borrowing ability, storage
5 costs, increased fuel and emissions costs caused by the need to use less efficient substitute aircraft,
6 leasing costs, ferry flight costs, compensation payments to passengers, lost profits, lost business
7 opportunities, damaged business relationships, loss of good will, loss of customers, increased costs
8 in maintenance and operations, breakage costs, as well as additional damages in the form of
9 additional expenses, costs of temporary cover, and other items.

10 210. Smartwings was also forced to reduce its flight schedules, shelve plans for
11 expansion, and lay off employees.

12 211. Even after the FAA and European Union's re-certifications of the MAX, some
13 countries have not approved the aircraft to return to service. Operations on those routes are more
14 expensive, and lack of certification prevents Smartwings from flying their MAX aircraft through
15 those countries' airspace (e.g. Russia, Turkey), resulting in "fly around" routing that increases
16 operating costs.

17 212. In addition to claiming damages, Smartwings seeks to revoke its acceptance of the
18 single MAX in its fleet that is owned and not leased.

19 **H. Boeing Even Breaches a Termination Agreement Arising Out of the MAX Grounding**

20 213. Smartwings and Boeing entered into a Deferred Termination Agreement in March
21 2020. The agreement precluded Smartwings from terminating its order for aircraft MSN 60134
22 and 60135 under the terms of the Purchase Agreement.

23 214. The Deferred Termination Agreement provided that "[a]fter each Termination
24 Deferral Expiration either Party may terminate the applicable Aircraft within thirty (30) days, in
25 which case Boeing will return to Customer all remaining advance payments paid by Customer for
26 the Delayed Aircraft."

27 215. Smartwings terminated its order for MSN 60134 by letter dated October 2, 2020.

1 224. MCAS is a material difference between the 737NG and the MAX. MCAS's
2 dangerous design flaw that allows it to force the aircraft into a fatal dive rendered the MAX aircraft
3 delivered to Smartwings not airworthy and not safe.

4 225. Boeing failed to disclose MCAS publicly or to Smartwings when it convinced
5 Smartwings to convert to an all-MAX airline.

6 226. Both before and after Smartwings' purchases, Boeing intentionally
7 mischaracterized MCAS as "an addition to speed trim" without disclosing the existence or details
8 of MCAS, all in order to avoid the greater certification and training impact that Boeing recognized
9 would be inevitable if Boeing was honest about MCAS.

10 227. The installation of MCAS also enabled Boeing to rely only on a supplemental type
11 certificate instead of a new type certificate.

12 228. MCAS's existence was not disclosed to MAX purchasers and pilots until after the
13 crash of Lion Air Flight 610 and after the Emergency Airworthiness Directive.

14 229. Even then, Boeing did not update flight manuals with appropriate procedures to
15 deal with an MCAS malfunction.

16 230. In April 2019, after the two fatal crashes, Boeing's CEO admitted that MCAS was
17 designed so that the MAX would "behave in the air similar to the previous generation of 737s."
18 Thus, Boeing knew that the design changes for the MAX made the aircraft behave differently from
19 the previous generation of 737, the 737NG.

20 231. Boeing did not disclose, publicly or to Smartwings, that the MAX behaved
21 differently from the 737NG.

22 232. Boeing did not disclose, publicly or to Smartwings, that it had added MCAS in an
23 effort to mask the MAX's unacceptable pitch up tendency.

24 233. Boeing knew that MCAS was a substantial and material change meant to counteract
25 the altered flight characteristics of the MAX as compared with the 737NG.

26 234. Boeing acted to keep MCAS secret from Smartwings, other customers, and pilots
27 in order to fulfill its marketing directive of minimal additional pilot training.

235. Boeing knew that MCAS had the potential to “run rampant,” or otherwise to engage persistently and force the MAX to dive if it received erroneous air data.

236. Boeing knew that there was a risk that MCAS would malfunction and cause a hazardous or catastrophic condition if one AOA sensor was faulty or damaged, but nevertheless designed MCAS to rely on only one sensor. Boeing knew that MCAS should not have been designed to receive data from only one AOA sensor. Boeing did not disclose this risk to Smartwings.

237. Boeing understood that there were potential risks in the operation of MCAS and the single AOA sensor on which MCAS relies, and Boeing was attempting to fix these when the aircraft was delivered. Boeing did not disclose these risks or these efforts, either publicly or to Smartwings, prior to or at the time of delivery of the aircraft.

238. Boeing knew that it needed to update the MAX flight manual to include a description of MCAS and to promulgate appropriate emergency procedures for MCAS malfunctions at least as early as the Emergency Airworthiness Directive.

239. Boeing did not update the MAX flight manuals in time to prevent the March 2019 Ethiopian Air crash or to avoid delivering a defective and unusable aircraft to Smartwings.

240. Boeing did not disclose these problems to purchasers, including Smartwings, because it did not want to jeopardize sales, including Boeing’s sale of the aircraft to Smartwings.

241. Boeing has continued to attempt to conceal the facts of the MAX’s development. Late on December 23, 2019, Boeing disclosed new documents to the United States House of Representatives that Boeing itself admitted portray a “very disturbing picture” of safety concerns raised by some employees and efforts to mislead regulators.⁸⁶

242. Boeing’s recent admission that MAX pilots need flight simulator training further

⁸⁶ Steve Miletich and Dominic Gates, “Boeing documents sent to House committee called ‘very disturbing,’” Seattle Times, Dec. 23, 2019 (available at <https://www.seattletimes.com/business/boeing-aerospace/boeing-documents-sent-to-house-committee-called-very-disturbing/>) (last accessed Jan. 28, 2021).

shows that Boeing's changes from the 737NG to the MAX were more drastic than were originally disclosed to purchasers.⁸⁷

243. Smartwings could not reasonably have discovered these defects on its own. Therefore, Smartwings' agreement to accept the aircraft at delivery cannot be used by Boeing as grounds for waiver of any claims by Smartwings arising out of this latent defect.

244. As a result of Boeing's fraudulent and wrongful conduct, Smartwings unwittingly purchased defective aircraft and exposed myriad people, including pilots, employees, agent representatives, and countless persons on the ground to undue risk of harm by flying those aircraft.

245. Even though the MAX is now beginning to return to service, Smartwings' ability to use the Aircraft continues to be substantially diminished. Smartwings' purpose for purchasing the aircraft was to serve the traveling public. Due to their continuing and legitimate safety fears resulting from Boeing's misconduct, many of these individuals are likely to avoid or refuse to fly on MAX aircraft. Moreover, recertification has been halting, with some countries continuing to evaluate the MAX's airworthiness. Smartwings continues to incur damages as it remains unable to operate MAX aircraft within the airspace of these countries, disrupting schedules and increasing operating costs through the operation of older, less-efficient aircraft and increased flight lengths as Smartwings is forced to "fly around" these jurisdictions.

VI. CLAIMS FOR RELIEF

A. **First Claim for Relief – Breach of Contract (Count One – Purchase Agreement)**

246. Smartwings realleges and incorporates each of the foregoing paragraphs as though fully set forth herein.

247. Smartwings bargained for and expected to receive aircraft that was a more efficient update to the 737NG and which would require minimal additional training for 737NG-trained pilots.

⁸⁷ Natalie Kitroeff and David Gelles, "Boeing Will Recommend 737 Max Flight Simulator Training for Pilots," New York Times, Jan. 7, 2020 (available at <https://www.nytimes.com/2020/01/07/business/boeing-737-max-simulator-training.html>) (last accessed Jan. 28, 2021).

1 248. Pursuant to the Purchase Agreement and its other contractual obligations, Boeing
2 was required to deliver to Smartwings aircraft that conformed to the appropriate Type Certificate
3 of the 737.

4 249. Boeing was also required to deliver airworthy aircraft to Smartwings that was
5 capable of being flown safely and met all regulatory requirements.

6 250. Boeing was also required to provide an aircraft that conformed to the Detail
7 Specification.

8 251. Boeing was also required to deliver additional aircraft to Smartwings in accordance
9 with the contractual delivery schedule.

10 252. Boeing further provided express and implied product warranties and assurances to
11 ensure that Smartwings could operate the aircraft.

12 253. Smartwings accepted the aircraft as represented in the Specification because
13 Smartwings believed that Boeing accurately represented the build of the aircraft in the Detail
14 Specification.

15 254. However, Boeing did not include any mention of MCAS in the Detail Specification.

16 255. Boeing failed to deliver two of the aircraft in a timely manner under Purchase
17 Agreement No. 3989.

18 256. The seven aircraft that Smartwings accepted and operated until March 2019 had
19 potentially fatal latent defects that were unknown to Smartwings but that rendered the aircraft not
20 airworthy.

21 257. A non-airworthy aircraft is essentially valueless to a commercial airline that relies
22 on safely flying passengers around for revenue.

23 258. Due to the safety concerns and the concern that Boeing could not deliver ordered
24 aircraft on time pursuant to the Purchase Agreement, Smartwings properly sought reasonable
25 assurances from Boeing and termination of its agreements.

26 259. Boeing failed to provide adequate assurances, and failed to return advance
27 payments, the purchase price, and failed to compensate Smartwings for its damages, in violation

1 of Washington law.

2 260. The above-described problems with the MAX were the result of Boeing's gross
3 negligence. Accordingly, certain contractual clauses purporting to limit or eliminate Boeing's
4 liability are unenforceable.

5 261. Smartwings has been harmed by Boeing's failure to deliver the bargained-for
6 aircraft and the aircraft that it was obligated to deliver pursuant to Smartwings' Purchase
7 Agreement and other agreements.

8 262. Smartwings is entitled to all applicable remedies available at law or in equity, in
9 aggregate or in the alternative, including but not limited to revocation of acceptance of Aircraft
10 60133 and/or recovery from Boeing of all direct, incidental, and consequential damages allowed
11 by law. Smartwings' remedies are not limited to the liquidated damages defined in the Purchase
12 Agreement, which were imposed on Smartwings in a contract of adhesion, did not reasonably
13 forecast just compensation for harm resulting from grounding of an entire aircraft model arising
14 out of Boeing's gross negligence and fraud, and such harms were and are reasonably ascertainable.

15 **B. Second Claim for Relief – Breach of Contract (Count Two – Deferred Termination**
16 **Agreement)**

17 263. Smartwings realleges and incorporates each of the foregoing paragraphs as though
18 fully set forth herein.

19 264. Smartwings and Boeing entered into a Deferred Termination Agreement that
20 required Boeing to return to Smartwings "all remaining advance payments paid by Customer for
21 the Delayed Aircraft" upon either party's termination of the purchase of MSN 60134 and MSN
22 60135.

23 265. Smartwings terminated the purchase of those aircraft on October 2, 2020 and
24 January 12, 2021. Boeing has withheld the return \$833,332 without legal justification and in
25 breach of the Deferred Termination Agreement.

26 266. Smartwings is entitled to all applicable remedies at law or in equity, available in
27 aggregate or in the alternative, including the return of these funds, prejudgment interest, and all

1 direct, incidental, and consequential damages allowed by law.

2 **C. Third Claim for Relief – Breach of the Duty of Good Faith and Fair Dealing**

3 267. Smartwings realleges and incorporates each of the foregoing paragraphs as though
4 fully set forth herein.

5 268. Under Washington law, every contract contains an implied covenant of good faith
6 and fair dealing. Where one party to the contract contravenes the intention and spirit of the contract,
7 that party is liable for breach of the implied covenant of good faith and fair dealing.

8 269. Boeing's actions and omissions as described in this Complaint were contrary to the
9 standards of good faith and fair dealing, and were made in such a manner as to deny Smartwings
10 the expected benefits of its bargained for agreements.

11 270. Smartwings' Purchase Agreement gave Boeing discretion over future contract
12 terms such as the discretion to design and manufacture Smartwings' Aircraft; to determine the
13 Specifications of the Aircraft; and to conform the Aircraft to the Purchase Agreement terms at
14 final delivery.

15 271. Boeing's conduct and omissions are in breach of the covenant of good faith and fair
16 dealing implied in Smartwings' Purchase Agreement and other assigned agreements for MAX
17 aircraft.

18 272. Smartwings has been harmed by Boeing's breach of the implied covenant of good
19 faith and fair dealing.

20 273. Smartwings is entitled to all applicable remedies at law or in equity, available in
21 aggregate or in the alternative, including but not limited to rescission of its purchase of the aircraft
22 and/or recovery from Boeing of all direct, incidental, and consequential damages allowed by law.

23 **D. Fourth Claim for Relief – Fraud**

24 274. Smartwings realleges and incorporates each of the foregoing paragraphs as though
25 fully set forth herein.

26 275. Boeing represented publicly and to Smartwings that the MAX was an update to the
27 737NG that would be more fuel efficient and otherwise have substantially similar flight

1 characteristics as the 737NG so that it would require minimal additional training for pilots already
2 qualified on the 737NG.

3 276. Boeing made these statements repeatedly to the public including, for example, in a
4 2014 edition of its publication Aero and in statements made at the 2017 Paris Air Show. Boeing
5 also made these statements specifically to Smartwings.

6 277. Boeing falsely represented to Smartwings in March 2013 and thereafter that the
7 MAX would not require pilot simulator training.

8 278. Boeing falsely represented to Smartwings in March 2013 and thereafter that the
9 training to transition pilots from the 737NG to the MAX would be Level B training, which is
10 computer-based training or classroom instruction.

11 279. Boeing falsely represented to Smartwings in March 2013 that the “Target for the
12 737 MAX program is Level B training (computer-based training or classroom instruction) from
13 the Next-Generation 737” because Boeing knew that it would incentivize Smartwings to enter into
14 the purchase agreement for MAX aircraft instead of choosing aircraft from another manufacturer.

15 280. Boeing falsely represented to Smartwings in March 2013 that the “System
16 Changes, such as LEAP engine and indications, environmental control system changes, fly-by-
17 wire spoilers, and electric landing gear control, will drive most of the Differences Training”
18 because Boeing knew that it would incentivize Smartwings to enter into the purchase agreement
19 for MAX aircraft instead of choosing aircraft from another manufacturer.

20 281. Boeing falsely represented to Smartwings on June 13, 2016 before Smartwings
21 accepted delivery of its first MAX that the “differences course target length is 1 day level B
22 training” because Boeing knew that it would incentivize Smartwings to accept delivery of the
23 MAX aircraft.

24 282. Boeing falsely represented to Smartwings on June 13, 2016 before Smartwings
25 accepted delivery of its first MAX that “no full flight simulator [is] required” because Boeing
26 knew that it would incentivize Smartwings to accept delivery of the MAX aircraft.

27 283. Boeing falsely represented to Smartwings on June 13, 2016 before Smartwings

1 accepted delivery of its first MAX that “no new 737MAX simulator [is] required” because Boeing
2 knew that it would incentivize Smartwings to accept delivery of the MAX aircraft.

3 284. Boeing knew its representations regarding Level B training, differences training,
4 and flight simulator training were false because Boeing knew that the MAX had materially
5 different flight characteristics from the 737NG that would require simulator training for safe
6 operation. Boeing knew that the MAX had materially different flight characteristics from the
7 737NG, requiring Boeing to include MCAS in the MAX.

8 285. Boeing did not disclose MCAS or the reasons why it was necessary in the MAX to
9 Smartwings. Boeing had a duty to disclose MCAS to customers and pilots. Failure to disclose
10 MCAS and train pilots on MCAS resulted in two fatal crashes.

11 286. Boeing did not disclose to Smartwings that MCAS could engage in a way that
12 would cause the MAX to enter into a dive based on a fault or malfunction in one of the aircraft’s
13 two AOA sensors.

14 287. Boeing did not disclose that it failed to educate pilots on MCAS or provide
15 appropriate emergency procedures for MCAS malfunctions.

16 288. The facts that the MAX had different flight characteristics than the 737NG, and the
17 inclusion of MCAS to counteract those flight characteristics, were material features of the MAX
18 as shown by the two crashes caused by MCAS.

19 289. Boeing’s Chief Technical Pilot for the MAX program, acting on Boeing’s behalf,
20 “basically lied to the regulators (unknowingly)” regarding MCAS during the FAA approval
21 process.

22 290. And that same Boeing official believed that Boeing sales people “just get paid to
23 drink with customers and lie about how awesome our airplanes were.”

24 291. Boeing included references to MCAS in its initial documentation going to
25 purchasers and pilots but removed them before that documentation was sent to Smartwings.

26 292. Boeing knew or should have known that Smartwings could not know about the
27 presence of MCAS, or the possibility of its engagement based on faulty or malfunctioning AOA

1 sensors, without Boeing disclosing such information to Smartwings.

2 293. Boeing knew or should have known that Smartwings would not purchase the
3 aircraft if it knew about MCAS or the potential that MCAS would persistently engage based on
4 faulty or malfunctioning AOA sensors.

5 294. Boeing did not disclose publicly or to Smartwings that the AOA Disagree warning
6 light did not function in many MAX aircraft.

7 295. Smartwings relied on Boeing's representations regarding the features and
8 performance of the MAX. Smartwings had the right to rely on Boeing's representations because
9 the MAX is an extremely complex product. Only Boeing was in a position to know the systems
10 and performance of the MAX.

11 296. Boeing purposely and repeatedly failed to disclose the existence of MCAS publicly
12 or to Smartwings. Boeing also purposely and repeatedly failed to disclose the different flight
13 characteristics of the MAX that were the reason for Boeing's addition of MCAS to the MAX.

14 297. Boeing provided Smartwings with MAX configuration specifications on March 15,
15 2013 that falsely stated "02-40-00 Airplane Quality and Delivery Workmanship, materials, and
16 methods used in the construction of the airplane comply with the requirements of the FAA and
17 Boeing standard practices for manufacture of airplanes. A system of inspection is maintained that
18 covers materials, fabrication methods, and completed parts. Inspections and tests of materials and
19 parts comply with Boeing and FAA procedures."

20 298. Boeing knew on March 15, 2013 that the MAX could not be manufactured in
21 compliance with FAA and Boeing standard practices under the delivery timeframe that Boeing set.
22 Boeing's delivery timeframe was driven by Boeing's desire to beat the Airbus A320neo to market.

23 299. Boeing knew on March 15, 2013 that it could manipulate the FAA inspection
24 procedure and manufacture the MAX outside of compliance.

25 300. Boeing's misrepresentations and omissions were false and misleading.

26 301. Smartwings has been harmed by Boeing's misrepresentations and omissions,
27 including the failure to disclose MCAS and other features and characteristics of the MAX.

1 Specifically, Smartwings has paid a substantial sum and has received an essentially valueless
2 aircraft.

3 302. Smartwings is entitled to all applicable remedies at law or in equity, available in
4 aggregate or in the alternative, including but not limited to rescission of its purchase of the aircraft
5 and/or recovery from Boeing of all direct, incidental, and consequential damages allowed by law
6 and equity.

7 **E. Fifth Claim for Relief – Material Misrepresentation of Fact**

8 303. Smartwings realleges and incorporates each of the foregoing paragraphs as though
9 fully set forth herein.

10 304. Boeing represented publicly and to Smartwings that the MAX was an update to the
11 737NG that would be more fuel efficient and otherwise have substantially similar flight
12 characteristics as the 737NG so that it would require minimal additional training for pilots already
13 qualified on the 737NG.

14 305. Boeing knew that the MAX had materially different flight characteristics from the
15 737NG, requiring Boeing to include MCAS in the MAX.

16 306. Boeing did not disclose MCAS or the reasons why it was necessary in the MAX to
17 Smartwings. Boeing had a duty to disclose MCAS to customers and pilots. Failure to disclose
18 MCAS and train pilots on MCAS resulted in two fatal crashes.

19 307. Boeing did not disclose to Smartwings that MCAS put the aircraft into an unwanted
20 and dangerous dive in the event of a fault or malfunction in one of the aircraft's two AOA sensors.

21 308. Boeing did not disclose that it failed to educate pilots on MCAS or provide
22 appropriate emergency procedures for MCAS malfunctions.

23 309. The facts that the MAX had different flight characteristics than the 737NG, and the
24 inclusion of MCAS to counteract those flight characteristics, were material features of the MAX
25 as shown by the two crashes caused by MCAS.

26 310. Boeing falsely represented to Smartwings in March 2013 and thereafter that the
27 MAX would not require pilot simulator training.

1 311. Boeing falsely represented to Smartwings in March 2013 and thereafter that the
2 training to transition pilots from the 737NG to the MAX would be Level B training, which is
3 computer-based training or classroom instruction.

4 312. Boeing falsely represented to Smartwings in March 2013 that the “Target for the
5 737 MAX program is Level B training (computer-based training or classroom instruction) from
6 the Next-Generation 737” because Boeing knew that it would incentivize Smartwings to enter into
7 the purchase agreement for MAX aircraft instead of choosing aircraft from another manufacturer.

8 313. Boeing falsely represented to Smartwings in March 2013 that the “System
9 Changes, such as LEAP engine and indications, environmental control system changes, fly-by-
10 wire spoilers, and electric landing gear control, will drive most of the Differences Training”
11 because Boeing knew that it would incentivize Smartwings to enter into the purchase agreement
12 for MAX aircraft instead of choosing aircraft from another manufacturer.

13 314. Boeing falsely represented to Smartwings on June 13, 2016 before Smartwings
14 accepted delivery of its first MAX that the “differences course target length is 1 day level B
15 training” because Boeing knew that it would incentivize Smartwings to accept delivery of the
16 MAX aircraft.

17 315. Boeing falsely represented to Smartwings on June 13, 2016 before Smartwings
18 accepted delivery of its first MAX that “no full flight simulator [is] required” because Boeing
19 knew that it would incentivize Smartwings to accept delivery of the MAX aircraft.

20 316. Boeing falsely represented to Smartwings on June 13, 2016 before Smartwings
21 accepted delivery of its first MAX that “no new 737MAX simulator [is] required” because Boeing
22 knew that it would incentivize Smartwings to accept delivery of the MAX aircraft.

23 317. Boeing knew its representations regarding Level B training, differences training,
24 and flight simulator training were false because Boeing knew that the MAX had materially
25 different flight characteristics from the 737NG that would require simulator training for safe
26 operation.

27 318. Boeing’s Chief Technical Pilot for the MAX development program “basically lied

1 to the regulators (unknowingly)” regarding MCAS during the FAA approval process.

2 319. And that same Boeing employee believed that Boeing sales people “just get paid to
3 drink with customers and lie about how awesome our airplanes were.”

4 320. Boeing included references to MCAS in its initial documentation going to
5 purchasers and pilots, but removed them before that documentation was sent to Smartwings.

6 321. Boeing knew or should have known that Smartwings could not know about the
7 presence of MCAS, or the possibility of its engagement based on faulty or malfunctioning AOA
8 sensors, without Boeing disclosing those issues to Smartwings.

9 322. Boeing knew or should have known that Smartwings would not select the MAX as
10 its new aircraft type for its fleet if it knew about MCAS or that MCAS would persistently engage
11 based on faulty or malfunctioning AOA sensors.

12 323. Boeing did not disclose publicly or to Smartwings that the AOA Disagree warning
13 light did not function in many MAX aircraft.

14 324. Boeing provided Smartwings with MAX configuration specifications on March 15,
15 2013 that falsely stated “02-40-00 Airplane Quality and Delivery Workmanship, materials, and
16 methods used in the construction of the airplane comply with the requirements of the FAA and
17 Boeing standard practices for manufacture of airplanes. A system of inspection is maintained that
18 covers materials, fabrication methods, and completed parts. Inspections and tests of materials and
19 parts comply with Boeing and FAA procedures.”

20 325. Boeing knew on March 15, 2013 that the MAX could not be manufactured in
21 compliance with FAA and Boeing standard practices under the delivery timeframe that Boeing set.
22 Boeing’s delivery timeframe was driven by Boeing’s desire to beat the Airbus A320neo to market.

23 326. Boeing knew on March 15, 2013 that it could manipulate the FAA inspection
24 procedure and manufacture the MAX outside of compliance.

25 327. Smartwings relied on Boeing’s representations regarding the features and
26 performance of the MAX.

27 328. Smartwings had the right to rely on Boeing’s representations, because the MAX is

1 an extremely complex product. Only Boeing was in a position to know the systems and
2 performance of the MAX.

3 329. Boeing purposely and repeatedly failed to disclose the existence of MCAS publicly
4 or to Smartwings.

5 330. Boeing also purposely and repeatedly failed to disclose the different flight
6 characteristics of the MAX that were the reason for Boeing's addition of MCAS to the MAX.

7 331. Boeing's misrepresentations and omissions were false and misleading.

8 332. Smartwings has been harmed by Boeing's misrepresentations and omissions,
9 including the failure to disclose MCAS and other features and characteristics of the MAX.

10 333. Smartwings is entitled to all applicable remedies available at law or in equity, in
11 aggregate or in the alternative, including but not limited to rescission of its purchase of the aircraft
12 and/or recovery from Boeing of all direct, incidental, and consequential damages.

13 **F. Sixth Claim for Relief – Violation of the Washington Consumer Protection Act, RCW**
14 **19.86.020**

15 334. Smartwings realleges and incorporates each of the foregoing paragraphs as though
16 fully set forth herein.

17 335. Boeing represented publicly and to Smartwings that the MAX was an update to the
18 737NG that would be more fuel efficient and otherwise have substantially similar flight
19 characteristics as the 737NG so that it would require minimal additional training for pilots already
20 qualified on the 737NG.

21 336. Boeing made these statements repeatedly to the public including, for example, in a
22 2014 edition of its publication Aero and in statements made at the 2017 Paris Air Show. Boeing
23 also made these statements directly to Smartwings.

24 337. Boeing knew that the MAX had materially different flight characteristics from the
25 737NG, requiring Boeing to include MCAS in the MAX.

26 338. Boeing did not disclose MCAS or the reasons why it was necessary in the MAX to
27 Smartwings.

1 339. Boeing did not disclose to Smartwings that MCAS could engage in a way that
2 would cause the MAX to enter into a dive based on a fault or malfunction in one of the aircraft's
3 two AOA sensors.

4 340. Boeing did not disclose that it failed to educate pilots on MCAS or provide
5 appropriate emergency procedures for MCAS malfunctions.

6 341. The fact that the MAX had different flight characteristics than the 737NG, and the
7 inclusion of MCAS to counteract those flight characteristics, were material features of the MAX
8 as shown by the two crashes caused by MCAS.

9 342. Boeing's Chief Technical Pilot for the MAX development program "basically lied
10 to the regulators (unknowingly)" regarding MCAS during the FAA approval process.

11 343. And that same Boeing employee believed that Boeing sales people "just get paid to
12 drink with customers and lie about how awesome our airplanes were."

13 344. Boeing included references to MCAS in its initial documentation going to
14 purchasers and pilots, but removed them before that documentation was sent to Smartwings.

15 345. Boeing knew or should have known that Smartwings could not know about the
16 presence of MCAS, or the possibility of its engagement based on faulty or malfunctioning AOA
17 sensors, without Boeing disclosing those issues to Smartwings.

18 346. Boeing knew or should have known that Smartwings would not purchase or lease
19 the aircraft if it knew about MCAS or the potential that MCAS would persistently engage based
20 on faulty or malfunctioning AOA sensors.

21 347. Boeing did not disclose publicly or to Smartwings that the AOA Disagree warning
22 light did not function in many MAX aircraft.

23 348. Boeing knew that Smartwings would not purchase or lease the MAX if it knew
24 about MCAS or the potential that MCAS would persistently engage based on faulty or
25 malfunctioning AOA sensors.

26 349. Boeing did not disclose MCAS to purchasers or pilots because doing so would
27 jeopardize sales, including the sale of the aircraft to Smartwings.

1 350. Boeing purposely and repeatedly failed to disclose the existence of MCAS publicly
2 or to Smartwings.

3 351. Boeing also purposely and repeatedly failed to disclose the different flight
4 characteristics of the MAX that were the reason for Boeing's addition of MCAS to the MAX.

5 352. Boeing's failure to disclose MCAS, the different flight characteristics of the MAX,
6 or the failure of AOA Disagree alerts to function properly was an unfair or deceptive act in trade
7 or commerce.

8 353. Boeing's unfair or deceptive conduct towards Smartwings affects the public
9 interest. Boeing's similar unfair or deceptive conduct towards other purchasers resulted in two
10 fatal plane crashes and the loss of hundreds of lives.

11 354. Smartwings is a person who has been injured in its business or property by Boeing's
12 unfair or deceptive acts or practices in the conduct of trade and commerce. Specifically, Boeing's
13 failure to disclose MCAS and other features and characteristics of the MAX caused Smartwings
14 to pay substantial sums to receive essentially valueless aircraft that were unusable shortly after
15 delivery and that are not expected to be fully useable for their intended purpose even after Boeing
16 repairs them.

17 355. Smartwings is entitled to all applicable remedies at law or inequity, available in
18 aggregate or in the alternative, including but not limited to rescission of its purchase of the aircraft
19 and/or recovery from Boeing of all direct, incidental, and consequential damages allowed by law.

20 **G. Seventh Claim for Relief – Product Liability under the Washington Product Liability**
21 **Act, RCW Ch. 7.72.**

22 356. Smartwings realleges and incorporates each of the foregoing paragraphs as though
23 fully set forth herein.

24 357. Boeing is the product seller and manufacturer as those terms are defined in RCW
25 7.72.010. The relevant product is the MAX and its systems and components, all of which were
26 designed, manufactured, tested, certified, and/or incorporated by Boeing.

27 358. Smartwings is entitled to bring a product liability claim, as that term is defined in

1 RCW 7.72.010, under RCW Ch. 7.72 (the “WPLA”). WPLA claims are not affected by any
2 disclaimers or limitations in the Purchase Agreement, and any such disclaimers or limitations are
3 inapplicable for the further reasons that Boeing’s practice of selling MAX aircraft for the purpose
4 of passenger air travel is an important public business suitable for public regulation, and that
5 Boeing has a decisive advantage in bargaining strength and imposes standardized adhesion
6 contract terms.

7 359. The MAX aircraft was not reasonably safe as designed because, at the time of
8 manufacture and delivery, the likelihood that the above-described defects would cause serious
9 harms outweighed the burden on Boeing to design a product that would have prevented those
10 harms.

11 360. An alternative design was practical and feasible and would not have reduced the
12 usefulness of the MAX in any way.

13 361. The aircraft were not reasonably safe because adequate warnings and instructions
14 were not provided. The likelihood that the MAX would cause serious harm, including harm to
15 Smartwings, rendered Boeing’s warnings and instructions inadequate. Boeing could easily have
16 provided adequate warnings and instructions.

17 362. Both before and after delivery of the aircraft, Boeing learned or should have learned
18 about the dangers connected with the MAX but did not fulfill its duty to act reasonably or prudently
19 to issue warnings and instructions. Boeing did not exercise reasonable care to inform Smartwings
20 and other MAX purchasers and pilots of these dangers or of necessary warnings and instructions.

21 363. The aircraft were not reasonably safe because they did not conform to Boeing’s
22 express and implied warranties.

23 364. The aircraft were not reasonably safe because they materially deviated from
24 Boeing’s design specifications and performance standards.

25 365. The aircraft were not reasonably safe because Boeing made express warranties of
26 material facts concerning the MAX that proved to be untrue.

27 366. The defects in the MAX are sudden and dangerous conditions and have created

1 sudden and calamitous events, and the safety and insurance interests of tort law are applicable to
2 Smartwings' claims.

3 367. Boeing's design of the MAX was defective, causing Smartwings' aircraft to be
4 inherently dangerous as recognized by the FAA and aviation regulatory agencies around the world
5 when they issued orders grounding the MAX, and by Boeing itself when it issued statements
6 saying that it agreed with the regulators' actions.

7 368. Smartwings' MAX aircraft suffered physical damage as a result of the above-
8 described defects. Specifically, the aircraft were grounded for nearly two years, during which time
9 they suffered physical damage in the form of deteriorated components, increased maintenance
10 requirements, and loss of value. They suffered physical damage because of changes in the
11 Minimum Equipment List that rendered them more prone to maintenance-caused groundings. In
12 addition, Boeing's defective design rendered Smartwings' Aircraft physically damaged such that
13 they required substantial repairs before the aircraft could be legally flown. These repairs included

- 14 • Changing the MCAS activation software to incorporate a maximum limit of one
15 nosedown stabilizer activation during a single elevated AOA event and cannot be reset by
16 pilot activation of the electric trim switches.
- 17 • Adding an AOA sensor monitor to prevent MCAS from using an AOA input if it differs
18 from the other AOA input by more than 5.5 degrees.
- 19 • Incorporating a maximum command limit to disable the MCAS and speed trim operations
20 if the stabilizer position exceeds a reference position, to ensure that sufficient elevator
21 control is available to provide maneuvering capability using control column inputs alone.
- 22 • Adding a cross FCC monitor to provide additional protections against MCAS
23 malfunctions or any other erroneous FCC-generated stabilizer trim command
- 24 • Changing the software to both primary flight displays (MAX Display System) to include
 - 25 • Improved AOA DISAGREE annunciation logic
 - 26 • AOA DISAGREE alert message

- 1 • Enabling the AOA DISAGREE annunciation regardless whether the aircraft is
- 2 equipped with the AOA gauge option
- 3 • Locking the AOA DISAGREE annunciation when the aircraft is below 400 feet in
- 4 altitude.
- 5 • Changing eight procedures in the Airplane Flight Manual.⁸⁸

6 The aircraft are expected to suffer additional physical damage when additional repairs are required
7 in the near future, including installation of an additional AOA sensor and additional cockpit
8 switches and controls.

9 369. While they were grounded, Smartwings' MAX aircraft were found to have
10 additional physical damage due to Boeing's product defects in the form of improperly installed
11 wiring that required significant repair.⁸⁹

12 370. The above-described physical defects were severe enough that some of
13 Smartwings' pilots carried a torquing bar to assist them in physically overpowering MCAS.

14 371. Smartwings averted a disaster like the Lion Air and Ethiopian Air crashes as result
15 of using the defective MAX due in large part to the grounding of the MAX by the FAA and EASA.
16 However, Smartwings need not wait for disaster to strike to be damaged as a result of the defective
17 MAX aircraft.

18 372. Boeing's product failures caused Smartwings to place its employees, agents, and
19 countless persons on the ground in danger and incur significant risk of harm.

20 373. Boeing's product failures caused Smartwings' pilots to suffer medical expenses and
21 severe emotional suffering.

22
23 ⁸⁸ FAA Summary of the FAA's Review of the Boeing 737 MAX, dated November 18, 2020, 00.
24 9-11 (accessible at
25 https://www.faa.gov/foia/electronic_reading_room/boeing_reading_room/media/737_RTS_Summary.pdf); *see also* EASA Boeing 737 MAX Return to Service Report Issued January 27, 2021,
26 accessible at
27 https://www.easa.europa.eu/sites/default/files/dfu/B737_Max_Return_to_Service_Report.pdf

⁸⁹ *Id.*

374. Smartwings has suffered and continues to suffer harm that is proximately caused by Boeing's violations of its obligations as a manufacturer and seller.

375. This harm includes, but is not limited to, (a) payment of substantial sums for the purchase and lease of the aircraft that cannot be used in commercial service for an extended period of time; (b) substantial sums spent in connection with the completion of the aircraft, (c) costs associated with the ownership and loss of use of the aircraft during the time they cannot be used for its intended purpose; (d) increased maintenance and storage costs; (e) cost to repair damage to the aircraft incurred as a result of the defects and the grounding; (f) loss in value; (g) justified fears and concerns and associated physical injuries; and (h) other costs and losses to be proven at trial.

376. Smartwings is entitled to all applicable remedies available in aggregate or in the alternative, including but not limited to rescission of its purchase of the aircraft and/or recovery from Boeing of all direct, incidental, and consequential damages allowed by law.

VII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff Smartwings a.s. respectfully requests this Court enter judgment in its favor and against Defendant for breach of contract, fraud, breach of the duty of good faith and fair dealing, material misrepresentation of fact, violation of the Washington Consumer Protection Act, and product liability under the Washington Product Liability Act, RCW Ch. 7.72, in aggregate or in the alternative:

a. That the Purchase Agreement be rescinded, Smartwings' acceptance of Aircraft 60133 be adjudged justifiably revoked and all payments made by Smartwings be immediately refunded;

b. That judgment be entered against Defendant for amounts owed under the breached Deferred Termination Agreement;

c. That judgment be entered against Defendant for Smartwings' damages in an amount to be determined at trial;

d. That Smartwings be awarded attorneys' fees, litigation costs, and interest to the full extent allowed by applicable law; and

e. That the Court grant such other and further relief as is just and equitable.

DATED: March 11, 2022.

LANE POWELL PC

By: s/ David M. Schoeggl

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